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## GAZETTEER

OF THE

# PROVINCE OF YUN-NAN.

GENERAL STAFF, INDIA.

1913.



SIMLA:

PRINTED AT THE GOVERNMENT MONOTYPE PRESS.

1913.

C148GSB

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*Note.—All previous editions of this work are obsolete and should be destroyed.*

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FIRST EDITION

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1902

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### List of Sketches in Pocket at end.

Eye-sketch of Man-waing.  
Plan of Kan-ai.  
Plan of Mong-ti and Nan-tien.  
Plan of T'êng-yüeh.  
Rough sketch of T'êng-yüeh plain.  
Panorama of T'êng-yüeh.  
Rough sketch of Yung-ch'ang Fu.  
Eye sketch of Mong-mow.  
Plan of Che-fang.  
Rough sketch of Hsia-kuan.  
Rough sketch of Ta-li Fu.  
Plan of Yün-nan Fu.  
Environs of Yün-nan Fu.  
Rough sketch of Shun-ning Fu.  
Rough sketch of Mien-ning T'ing.  
Rough sketch of Ssu-mao T'ing.  
Rough sketch of P'u-êrh Fu.  
Rough sketch of Wei-yüan T'ing.  
Plan of San-ta,

**CONFIDENTIAL.**

GAZETTEER  
OF THE  
PROVINCE OF YÜN-NAN.

**A-LU-SHIH.**—LAT.  $24^{\circ} 50'$ ; LONG.  $99^{\circ} 55'$ ; HEIGHT 6,400 feet.

A large village in the Shun-ning district, on the road from Ta-li to Shun-ning. It is of no great importance, but is the only place of any size lying on the road between Mêng-hua and Shun-ning. It contains about 150 houses and is built on a saddle in the hills, with no flat ground round it. There are a good many villages around it, and the hillsides are cut into terraced fields. The population is Chinese. There is a small official with the rank of Hsün-kuan. No very large supplies could be got. Camping-grounds could be found in the terraced fields. Grass is very scarce in the cold weather. [Davies, 1894.]

**A-MI CHOU.**—LAT.  $23^{\circ} 48'$ ; LONG.  $103^{\circ} 14'$ ; HEIGHT 3,700 feet.

A small town in the Lin-an district with a population of about 7,000. It is situated in a plain  $10\frac{1}{2}$  miles long from north to south, by  $1\frac{1}{4}$  miles broad, bounded by a large stream, called after the town. The town is square in shape, with rounded corners, each side being about 400 yards long. The wall is 20 feet high, of stone, topped with brick, newly repaired, and backed by a 6-foot parapet of earth. There is a gate in each face, at irregular intervals. The interior space is fairly filled with poor houses, about 500 in number, and there are small outlying suburbs of flat-roofed houses with mud walls.

There is little trade, and the shops are small. The plain in which the town stands contains about 30 villages, the inhabitants of which are Chinese, whilst Lolos occupy the neighbouring hills in large numbers.

It is an important station on the Tong-king-Yün-nan Fu Railway Line.

The town is commanded on the south-west by a low range of hills 400 yards from the town and 200 feet above it. The hills bounding the plain on the east rise to a height of 3,500 feet, those on the west are low, and all are bare of trees.

A *Chou-kuan* resides in the town, and a junior police official, but no military officers. [Ryder 1898.]

CHAN-TA.—*See* San-ta.

CHAN-YI-CHOU.—LAT.  $25^{\circ} 32'$ ; LONG.  $103^{\circ} 44'$ ; HEIGHT 6,500 feet.

The town is situated in the Ch'ü-ching-Lu-liang plain, which covers an area of 50 miles by 5 miles. The town itself lies about 1 mile from the north of the plain, and about  $\frac{1}{4}$  mile from the foot of the hills on the west. It is built on slightly rising ground, about 50 feet above the level of the surrounding paddy-fields. Its shape is irregular, with a total perimeter of about  $1\frac{1}{2}$  miles. It is surrounded by a wall 20 feet high, with stone foundations surmounted by brick, and backed on the inside by an earthen parapet. There are four gates, one in each face. The town contains between 500 and 600 houses, but the suburbs are small.

*Point of attack.*—The town is commanded from the west at a range of 1,000 yards.

*Supplies and transport.*—Fair quantities of supplies, and mules are obtainable in the town, which is on the main trade route from Yün-nan Fu to Ch'ung-king. The plain is rich. Carts drawn by a buffalo or bullock are used for farming, but not for trading purposes. They can go to Ch'ü-ching Fu and Yüeh-chou, but not to Sung-lin or Lu-liang Chou.

*Government.*—The *Chou-kuan* is under the *Fu-kuan* of Ch'ü-ching. The district also includes the small town and plain of Sung-lin.

The Ch'ü-ching is navigable for boats down to Lu-liang Chou but only for two or three miles above Chan-yi Chou. [Davies, 1898.]

Intermediate office on the Yün-nan Fu, Lu-chou telegraph line.

CHAO-T'UNG FU.—LAT.  $27^{\circ} 21'$ ; LONG.  $103^{\circ} 35'$ ; HEIGHT 6,600 feet.

The Chao-t'ung plain is about 20 miles by 10, but this area is much broken up by small hills, and most of the rest consists of rolling uplands.

The town contains about 30,000 inhabitants and is built at the southern end of the plain; it lies on the main road from Yü-nan Fu to Sui-fu and is important as a dépôt through which most of the trade between Yü-nan and Ssu-ch'uan passes. The town is walled, nearly a mile square and surrounded on all sides except the north-east by suburbs.

*Point of attack.*—The town is commanded by hills on the south and south-east, but an advance from this direction would lie for the last 600 yards across an open, rather marshy, cultivated plain. If an attack was made from the north and north-east, a small amount of cover would be afforded by outlying villages.

*Supplies.*—In the plain are grown good crops of Indian corn, millet and potatoes. The white wax is cultivated to a certain extent. [Watts-Jones, 1898.]

CHE-FANG.—See Se-fang.

CHEN-HKAWNG (I).—LAT.  $23^{\circ} 15'$ ; LONG.  $100^{\circ}$ ; HEIGHT 4,250 feet.

Called Chén-k'ung by the Chinese.

The chief village of a small circle above the right bank of the Mekong near the Ta-huan ferry.

The village is built on a spur and consists of four groups of houses. The most westerly group consists of about 50 houses and is surrounded by the remains of an old wall. A short distance along the spur are the bazaar huts, and above them a few Chinese houses. On a knoll to the east of the bazaar is a group of about 40 houses and below, on the hillside, a Chinese settlement of about 50 houses.

*Government.*—There is a *Sawbwa* who is directly under the Chén-pien officials. His authority appears to be merely nominal.

*Supplies.*—There is a five-day bazaar, but supplies are limited.

*Camping-grounds.*—There are no good camping-grounds near the town; a few men could encamp by the bazaar sheds, but any party over 50 would have to occupy the paddy-fields below the town, near the bridge on the left bank of the Nam-kaw.

*Communications.*—The town is on the most direct route from Kêng-ma and Mêng-mêng to P'u-èrh. [Turner, 1900.]

CHEN-HKAWNG (II).—LAT. 22° 40'; LONG. 100° 45'.

A small Shan State on the right bank of the Mekong, below La-hsa. There is a ferry across the river here. [Davies, 1895, from Native information.]

CHEN-K'ANG.—LAT. 24° 7'; LONG. 99° 20'; HEIGHT 2,950 feet.

A Chinese Shan State, east of the Salween, also called Möng-cheng. The plain, in which the town is situated, lies along the Nam-cheng and is 2 miles long and about  $\frac{3}{4}$  mile wide. Another plain about 1 mile long by  $\frac{1}{2}$  mile wide runs down the Nam-ka, which joins the Nam-cheng, a little below the town. The plain contains 10 or 12 small Shan villages.

The town stands on some grassy, high-lying ground, running out to a point between the valleys of the Nam-cheng and Nam-ka. It is surrounded by the remains of a mud wall, 8 feet high, in bad repair.

The interior contains two Chinese temples, four *Kyaungs* and about 300 houses. In the upper or south part of the town is the *Sawbwa's* palace, surrounded by a 10 feet wall, measuring 100 yards by 70 yards, and commanded from the south by a wooded spur, which runs down within 400 yards range. The houses in the town are built of mud or soft bricks, with thatched roofs. The bazaar lies just outside the east wall of the town.

The Nam-cheng, a tributary of the Yung-ch'ang river, is, in February, 18 yards wide,  $1\frac{1}{2}$  feet deep with strong current and stony bottom.

The Nam-ka is 10 yards wide, 1 foot deep, with strong current, running in a shallow bed 50 yards wide.

*Trade, supplies and transport.*—The trade is very small. Ordinary supplies in very small quantities are obtainable. Grass

is very scarce in the dry season. There are only a few mules belonging to the place.

*The State.*—To the north, the State touches the Yung-ch'ang district, the boundary skirting the ridge to the south of Mêng-po-lo. To the north-east it is divided from the Shun-ning district by the range separating the Nam-ti from the Hsi-la river. Eastwards the water-shed of the Nam-cheng and the Nam-ting separates it from Kêng-ma State. To the south it also borders on Kêng-ma, the boundary being a ridge dividing the Nam-to from the Nam-yang. To the west it joins the Tawnio district of Thein-ni and further north its eastern boundary is the Salween.

The principal places in the State are Hsiao-mêng-t'ung or Möng-hawng, Möng-hom or Mêng-hung, Mèng-pun, Mêng-p'êng and Mêng-ti.

*Government.*—The state pays an annual tribute to Yung-ch'ang Fu. The whole State is divided into four districts governed by headmen.

*Population.*—The Shans inhabit the Chên-k'ang and Mêng-ti plains, but the bulk of the population in the Mêng-hom plain is La, and the hills are occupied chiefly by Chinese with a few Lolos and Palaungs. [Davies, 1898.]

CHEN-LAWT.—LAT.  $22^{\circ} 54'$ ; LONG.  $100^{\circ} 20'$ ; HEIGHT 4,350 feet.

Called also Ch'üan-lo by the Chinese.

A Chinese town of about 250 houses in the Chên-pien district, lying one march west of the Mekong; it is built on a gently sloping terrace, measuring about  $1\frac{1}{2}$  miles each way, and surrounded on all sides by hilly country.

It is in the form of an elongated oval, about 800 yards long by 300 wide across the middle, and is surrounded by a loop-holed mud wall, 15 feet high and 2 feet thick with two wooden gates in each of the west and east sides.

*Point of attack.*—It is commanded from hills on the Möng-nyim road at a range of 1,500 yards, from the east at about 350 yards, and the north-west at about 500 yards. A nullah runs near the west side of the town, which would give cover up to within 300 yards of the wall.

*Supplies.*—Cattle, paddy and rice are obtainable, but few vegetables and no flour.

*Government.*—The *Hsin-chén* is subordinate to the District Magistrate at Mêng-lang.

There is a Lahu *Sawbwa*, but the Lahus themselves, though formerly ruling the town, have been under the Chinese since 1891.

*Communications.*—The town lies on the present main road from Kun-long to Ssü-mao T'ing though there is said to be a shorter route from Möng Nyim-nö to Mawk-lai ferry, passing north of Chen-lawt. The present road goes north by Nan-pei ferry, but there is said to be a shorter road crossing the Mekong at La-hsa ferry. The road to P'u-êrh follows the Nan-pei-Ssu-mao route as far as P'a-tê ferry on the Wei-yuan Chiang, branching off from there. To the south-west there is a road from Chen-lawt to Chén-pien T'ing and Möng-lem. [Davies, 1895.]

CHÉN-NAN CHOU.—LAT.  $25^{\circ} 12'$ ; LONG.  $101^{\circ} 17'$ ; HEIGHT 6,275 feet.

The town stands near the middle of a plain 4 miles long and about  $1\frac{1}{2}$  miles broad, intersected from north-west to south-east by a fordable stream 30 yards wide. The town wall is of brick, 25 feet high and 20 feet thick, backed by a parapet 20 feet high and 8 to 10 feet thick. The crenulations are mostly broken, and the parapet in many places washed away leaving hardly any banquette. The town is irregular in shape, its long sides running approximately from north-west to south-east. There is a gateway in each quarter and the main street joins the west and east gates, and is lined with houses. There are a good many houses in the north corner, but the remainder of the interior space is thinly built over, in all about 500 small houses and the inns are bad. The inhabitants are mostly Chinese.

*Point of attack.*—The town is commanded by a hill with a temple on it, 400 yards from the north-west face of the town and about 300 feet above it.

*Government.*—The *Chou-kuan* is subordinate to the *Fu-kuan* of Ch'u-hsiung.

*Supplies and transport.*—Supplies are good, but there are no mules.

*Communications.*—The town lies on the main road from Ta-li-Fu to Yün-nan Fu. There is a road to the north through Yao-chou to Ta-yao Hsien. [Davies, 1898].

CHEN-PIEN T'ING.—LAT.  $22^{\circ} 35'$ ; LONG.  $100^{\circ} 2'$ ; HEIGHT 4,950 feet.

Also known as Pu-hsung to the Shans.

It is the head-quarters of the new district established by the Chinese in the La-hu and Wa country to the south of the Shun-ning district, and includes the Shan State of Möng-lem. The town is situated about  $4\frac{1}{2}$  miles by road to the east-north-east of Möng-lang at the eastern end of a deep uncultivated valley. The present post is new, having been rebuilt on the remains of the old one, burnt down in 1899. Though unwalled, there are remains of block-houses at the north-east and south-west corners. The present town is quadrilateral in shape and contains about 50 houses and shops, built of soft bricks and thatched. At the north-east corner of the town are the military head-quarters and the commandant's house surrounded by a loop-holed brick wall 10 feet high. Above these again are the civil head-quarters surrounded by a loop-holed wall of mud. The town is quite indefensible, being commanded by heights on the north, east and south. The water-supply, from three small wells, appears to be scanty, whilst the inhabitants appear to be entirely dependent on supplies brought up from below, as there is little or no cultivation round the town.

*Government.*—The district is under a *T'ing kuan*, who has under him the smaller districts of Chen-lawt and Man-nawng each under a *Hsin-chén*, and the small Shan States of Möng-kaw, Möng-hsung, Möng-tum and Möng-lem.

*Camping-grounds.*—The only camping-ground near the town is on the Möng-lang road by a small stream, 400 yards from the town. Utilizing the fields above the road, there is room for about 150 men. [Davies, 1895; Turner, 1900.]

CHÊNG-TUNG.—See Hsip-Sawng-Panna.

CH'ENG-CHIANG FU.—LAT.  $24^{\circ} 40'$ ; LONG.  $102^{\circ} 53'$ . HEIGHT 6,000 feet.

A town of about 500 houses situated at the north end of the plain which bounds the Ch'eng-chiang lake. This plain is

3½ miles from north to south and 4 miles from east to west, with a total area of 12 square miles and containing, besides the town, about 30 villages. It is well irrigated and cultivated, with a population of about 12,000. The town is surrounded by a ditch and a wall of brick and stone, 15 feet high, backed by an earthen parapet 10 feet high and 6 feet broad at the top, and is about 400 yards by 600. There is a gate in each face; the north gate being little used. The interior space is thinly built over. There are no adjoining suburbs. The streets are broad and comparatively clean.

*Point of attack.*—The town is quite indefensible, being commanded by a hill 1 mile to the north and 800 feet above it.

*Trade and supplies.*—Small, there is no particular item of export.

[*Ryder, 1899.*]

CHIEN-CH'UAN CHOU.—LAT. 26° 30'; LONG. 99° 50'.

A walled town on the road from T'êng-yueh T'ing to Li-chiang Fu situated at the foot of the hills bounding the west side of a plain 11 miles long and 4 miles wide, which contains a lake 4 miles long, by 2 miles broad. The plain contains 30 or 40 villages, with a total population—including the town—of about 15,000.

The town is about 1,000 yards long from north to south by 600 yards broad. It is surrounded by a wall 10 feet high, in fair repair, backed by an earthen parapet 10 feet wide. There are gates on each of the four faces. The main street runs from north to south, and the interior space is well built over, containing about 1,500 houses. There are no exterior suburbs. The inhabitants, who number about 8,000, are Chinese and Min-chias.

*Government.*—The *Chou-kuan* is subordinate to the *Fu-kuan* of Ta-li.

The town is commanded by the hills on the west only.

Just after leaving the lake, the river Yang-pi is crossed by a 3-arch masonry bridge, 25 yards long.

The town is a great mule-breeding centre.

*Communications.*—Roads lead south to Ta-li Fu, north to Ba-t'ang *via* Shih-ku and east to Yün-lung Chou. There is also a road down the valley to Yang-pi. [*Ryder, 1899.*]

CHING-TUNG T'ING—LAT.  $24^{\circ} 26' N.$ ; LONG.  $100^{\circ} 57' E.$ ; HEIGHT 3,875 feet.

*The town.*—The town lies in the valley of the Pa-pien Ho,  $\frac{1}{2}$  mile from the right bank, at the foot of a range of hills 1,000 feet high, which slope back in turn to the main Wu-Liao Shan range, forming the watershed between the Mekong and Pa-pien Ho. At this point the plain is about  $2\frac{1}{4}$  miles wide, and is extremely fertile, being largely under paddy and sugar-cane cultivation. Both banks of the river are dotted with numerous villages and the ruins of many others shew the former prosperity of the district. The town itself contains about 600 houses and consists of one paved street 1,470 yards long, running from north to south. The business quarter of the town is located in the lower half of the street, which is 750 yards long and lined with poor shops. In the centre of the main street is a large archway of sandstone and, at its northern extremity, a deep well, where the drinking supply is obtained. This half of the town is unwalled, but the northern half is skirted on the east by a wall of sandstone bricks, 8 feet high and  $1\frac{1}{2}$  feet thick which is loopholed for about 300 yards but is generally in bad repair. This wall has no ditch. The official residences and barracks are on a small knoll in the southern or business quarter, whilst the northern suburb contains the ruins of many *yamens* and temples. A small blockhouse of sandstone overlooks the town from a knoll  $\frac{1}{4}$  mile to the west.

*Point of attack.*—The town is an open one and, beyond street fighting, little resistance might be expected. The town could easily be turned by an advance from the south and there is a good artillery position on a spur just south of the P'u-êrh Fu road at 1,000 yards range.

*Government.*—The town is in charge of a *T'ing-kuan*.

*Supplies and trade.*—Being on the route from Ta-li Fu to P'u-êrh Fu there is a certain amount of trade in the district, and supplies might be obtained in moderate quantities. Probably 100 mules could be obtained in the vicinity.

*Camping-grounds.*—Extensive camping-grounds could be formed anywhere in the plain. The Pa-pien Ho at this point is about 45 yards wide,  $2\frac{1}{2}$  feet deep with a current of about  $2\frac{3}{4}$  miles per hour. It runs in a bed of small stones 80 yards wide and is bridged by temporary wooden trestle bridges at several places in the vicinity.

*Communications.*—The town lies midway on the main road between Ta-li Fu and P'u-êrh Fu. A road also runs east through O-chia-hsien to Nan-an Chou. To Yün Chou there are two practicable routes, one diverging north and the other south of the Wu Liao Shan range (highest point 11,500 feet) which lies in a direct line between the two towns. The northern route runs via Pao-t'ien-kai and A-lo-kai to the Mekong at Man-hsing or Hsin-ts'un ferry and thence to Yün Chou via Mêng-lang. [Fraser, 1900.]

CHIU-CH'ENG.—See Kan-ai.

CH'UAN-LO—(*vide* CHEN-LAWT.)

CHU-YÜAN.—LAT.  $24^{\circ} 6'$  N.; LONG.  $103^{\circ} 28'$  E.; HEIGHT 3,890 feet.

*The town.*—Chu-yüan though not ranking as a town, and having little or no defensible value, is of importance owing to its position at the junction of several main roads. It is situated about  $\frac{3}{4}$  mile distant from the left bank of the Nan-ch'iao Ho, which debouches on the plain through a deep ravine in the hills bounding the west of the plain, at a point north-west of the village. The village lies at the foot of a range of bare hills bounding the east of the plain, which running from north to south, is about  $1\frac{1}{4}$  miles wide at this point and largely under sugar-cane cultivation. The village is 1,150 yards long by 110 yards broad, its longer axis running from north to south. It is surrounded by a mud wall 7 feet high, similar to those seen round many Shan villages near our frontier. It is roughly loopholed in four tiers, but possesses neither parapet nor ditch. At the north and south ends are gateways of stone and there are several minor gateways of brick on the west face. The main street, which is paved and 7 yards wide, connects the north and south gateways. It is lined with shops of the usual pattern and contains several fairly good mule-inns. In the centre of the town is a spacious temple which would accommodate 500 men.

*Point of attack.*—The village is practically open and of little defensible value. It is commanded at point blank range by a hill 150 feet high at the foot of which it lies.

*Government.*—The village is under the *Hsien-kuan* of Ch'i pei.

*Supplies.*—Supplies in small quantities, and a fair amount of fodder might be reckoned on. Probably 200 mules might be obtained locally and from the caravans continually passing through.

*Camping-grounds.*—Extensive camps could be formed in the cane fields in the plain and good water obtained from the river.

*Communications.*—From Yün-nan Fu a main trade route runs south to A-mi Chou, whilst the other goes east-south-east through Ta-chiang-pien and Ch'iu-pei Hsien to Kuang-nan Fu and thence to Pai-sê Ting, which is the dépôt for river-borne traffic to and from Canton. [Fraser, 1900.]

CH'U-HSIUNG FU.—LAT.  $25^{\circ} 4'$ ; LONG.  $101^{\circ} 35'$ ; HEIGHT 6,150 feet.

The town stands at the southern edge of a plain 5 miles long by  $1\frac{1}{2}$  miles wide, watered by the Ch'u-hsiung Ho (40 yards wide, not easily fordable except from March to May when it is fordable in several places) which runs down the plain with a sluggish current in an easterly direction.

It is surrounded by a brick wall, 20 feet high and 2 feet thick, backed by an interior parapet of earth 14 feet high and varying in thickness from 15 to 40 feet. The town is in the form of an irregular oblong. There are five gates, one in the north face and two each in the east and west faces, but the two most southerly gates in the east and west faces have been blocked up by mud walls. Each of the gates in use is protected by a traverse in the form of a wall 15 feet high, enclosing a small semi-circular space in front of the gate.

The main bazaar street joins the east and west gates. Outside the town are a good many scattered houses, but a great part of the interior space is given up to fields, and the southern quarter is quite uninhabited. Inside the town there are about 350 houses, and about 250 more in a suburb outside the west gate.

*Point of attack.*—The town is commanded from hills to the south at 800 yards range, and is also slightly commanded from a small hill, 500 yards east of the south-east corner of the town.

*Supplies and transport.*—There is very little trade, and, as the plain is a poor one, supplies would be small. A few mules might be got.

*Government.*—The *Fu-kuan* is subordinate to the *Tao-t'ai* of Yün-nan Fu.

*Communications.*—The town lies on the main road, nearly half-way between Yün-nan Fu and Ta-li Fu. [Davies, 1898.]

Intermediate office on the Yün-nan Fu-Bhamo telegraph line.

CH'Ü-CHING FU.—LAT. 25° 31'; LONG. 103° 43'; HEIGHT 6,450 feet.

The plain in which the town stands extends from above Chan-yi Chou to the north to below Lu-liang Chou, a total length of 50 miles with an average breadth of 5 miles. It is watered by the Ch'ü-ching river, which is from 40 to 100 yards wide and navigable.

The town is situated near the foot of the hills which bound the plain on the west, on the right bank of the Ch'ü-ching river and 2 or three miles from it. It is nearly square, measuring about 900 yards each way. It is entered by four gateways, one in each face. The wall is of brick, with stone foundations, 25 feet high and 2 feet thick, with an interior parapet of earth 20 feet high. The main street connects the east and west gates, and the whole town contains about 1,000 houses. There are few suburbs. A stream, 25 yards wide, skirts the south face of the town.

*Point of attack.*—The town is commanded by a spur to the west at a distance of about 1,000 yards.

*Trade.*—Lying off the main trade route between Yün-nan Fu and Chung-king, the town is not a large trade centre. There is a considerable weaving industry, the yarn being Indian, imported *via* Hong-Kong. Opium is extensively grown, and there is a large trade with the capital in earthenware, which is made at Mao-mao-shih, a village about 20 miles below the town.

*Supplies and transport.*—Supplies of rice, vegetables, flour, beans, cattle and pigs are to be obtained in large quantities. Mule transport is fairly plentiful. For agricultural purposes

carts drawn by one buffalo or bullock are used, but are not much utilized for trading.

*Government.*—The *Fu-kuan*, who has under his jurisdiction eight smaller towns, is subordinate to the *Tao-t'ai*, at Hsün-tien Chou.

*Communications.*—There are two roads to Yün-nan Fu, *vid* Ma-lung Chou and *vid* Yi-liang Hsien. The former is shorter and better. Yi-liang Hsien can be reached by boat, but the journey can be done as quickly by road. There is a second road to Yi-liang which does not pass by Lu-liang Chou. [Davies, 1898.]

Intermediate Telegraph office on the Yün-nan Fu Lu-chou line.

HKU-YUNG.—*See* Ku-Yung Kai.

HO-CH'ING CHOU.—LAT, 26° 34'; LONG, 100° 15'; HEIGHT 7,500 feet.

The town lies rather to the west of the middle of the Ho-ch'ing plain which, including the Ch'i-ho plain, is about 25 miles long by four miles wide and contains about 70,000 people. The upper end slopes gently to the south and is well cultivated. It is bounded on the east and west by pine-covered limestone hills. The southern part of the plain is quite flat and contains marshy ground in places. It is inhabited principally by Li-chias, a separate race somewhat resembling the Min-chias of the Ta-li plain.

The town, which contains about 14,000 inhabitants, is surrounded by a brick wall 12 feet high with an interior parapet and banquette. On the outside is a wet ditch 12 yards wide. The southern gateway is protected by an earthwork.

Continuous suburbs of sun-dried brick stretch for some distance outside the north and south gates, but there are no houses on the other two faces. The town which is oblong in shape, is 1,300 yards from north to south, by 600 yards wide.

*Point of attack.*—The town is commanded by the hill to the west, but at over two miles range. If badly defended, it might be "rushed" along the road from north or south, the former being easier. If properly defended, it would be a stronger place than most, especially when the surrounding fields are under irrigation.

*Trade and supplies.*—Large supplies of all sorts are obtainable. The town carries on a large trade with Ta-li, Li-chiang and Tibet, and several rich merchants live here.

*Government.*—The *Chou-kuan* is subordinate to the *Fu-kuan* of Li-chiang.

*Communications.*—Roads lead north to Li-chiang and Tibet south to Ta-li Fu, and east to Yung-pēi T'ing. [Watts-Jones, 1898.]

HO-HSA (HU-SA).—LAT.  $24^{\circ} 27'$ ; LONG.  $97^{\circ} 56'$ ; HEIGHT 4,500 feet.

Called Hotha by the Burmese. The two states of Ho-hsa and La-hsa are often called Möng-hsa by the Shans and Maing-tha by the Burmese.

A small State on the Nam-hsa, a tributary on the left bank of the Ta-ping.

*General description.*—The State lies in the valley of the Nam-hsa which running down from the hills to the north-east here flows through a plain 4 or 5 miles long and two miles wide in the middle, but narrowing down to a breadth of  $\frac{1}{2}$  mile at each end. This valley runs roughly from east-north-east to west-south-west, the eastern half is occupied by Ho-hsa and the western half by La-hsa. The whole of the centre of the valley is covered with paddy cultivation, and the villages are with one or two exceptions built off the paddy ground at the foot of the hills which bound the valley on both sides, and are so numerous in proportion to the size of the plain that they form almost a continuous line from one end of the valley to the other. The valley itself and most of the surrounding hillsides are bare, but round many of the villages groves of trees have been planted. The houses are nearly all built in the Chinese style, of soft bricks. The whole valley is some 1,500 feet above the neighbouring plains of Möng-wan and Möng-na, and consequently the hills which bound it only rise 800 to 1,000 feet above it. The climate is cold and healthy, and Chinese can live there the whole year round.

*Inhabitants.*—The majority of the inhabitants are a race called Ngachang or Achang, who though they dress like Chinese Shans, and in their customs and religion resemble them, yet are quite distinct both in feature and language.

Their language closely resembles the dialects of the Szi, Lashi, and Maru Kachins, and they are possibly connected with these tribes. They are often spoken of as Maingtha Shans or Ho-hsa Shans, and they have become Buddhists and adopted Shan customs to such an extent that practically they may be considered as Chinese Shans. There is also a large Chinese population in the plain, and they are nearly as numerous as the Ngachangs. These Chinese, however, having lived here for generations have somewhat lost their national characteristics, and it is difficult to distinguish them from the Achangs. There is one Lisaw village at the east end of the plain, and the surrounding hills are peopled by Kachins with a few Palaungs.

*Boundaries.*—To the west and north, Ho-hsa is divided from Möng-na by the crest line of the hills which form the Ta-ping-Nam-hsa watershed. To the east and south-east the Nam-hsa-Nam-wan watershed separates the State from Möng-wan. To the south-west a stream running into the left bank of the Nam-hsa between Len-möng and Chen-ho forms the Ho-hsa-La-hsa boundary, which is continued up another small stream, the Nam-hkawng, which runs into the right bank of the Nam-hsa between Low-li and Hai-nang. These two streams may be roughly taken as the boundary, but the village of Lakhum to the west of this line belongs to Ho-hsa, while Kung-kyeng, which is to the east of it, is under La-hsa.

*Government.*—The state is governed by a *Sawbwa*, who pays tribute to T'êng-yüeh. The plain villages are divided into districts each under a *kang*. The headquarters of these districts are at the villages of Mawkmai, Man-aw, Man-hai, and Hsen-kang.

*Trade.*—The Ho-hsa State is so poor that there are practically no exports. The rice grown is not sufficient for the population of the valley, and it has to be bought in Möng-na and elsewhere. There are no pack mules or bullocks in the State, and the little trade that is done is carried on by men on foot with baskets. Owing to the poor ness of the soil and the lack of cultivable ground, large numbers of the Ngachangs go out every year in the cold season to the neighbouring Shan States and the north of Burma to work as carpenters, blacksmiths, and coolies, to earn money to buy rice.

*Supplies.*—The State is very poor and no large supplies could be got. Beef would be very scarce, though enough

paddy and rice might be got for a day or two for a force passing through the valley. There are bazaars held every five days at the capital and at Mantong and Manhkong. There is no grass in the valley, in the dry weather the animals being fed on straw. Grass would have to be cut from near the tops of the surrounding hills 600 or 800 feet above the plain. In May and June grass is plentiful.

*Transport.*—There is no transport to be got in the State except coolies. There are no boats on the Nam-hsa.

*The Nam-hsa in Ho-hsa.*—The Nam-hsa, which runs down the middle of the plain, is from 15 to 25 yards wide and 1 to 2 feet deep in January. It has a moderate current and a sandy bed. It is fordable throughout the year, though the fords are deep after heavy rains. There are bridges at :—

- (1) Se-kow-Sepyek.
- (2) Man-hai-Ho-hsa town.
- (3) Len-mông-Hsen-kang.

These are intended as foot bridges, but if in good repair could be used by animals. There are no boats, and the river is not navigated. *For bridges lower down see under La-hsa.*

*The town of Ho-hsa.*—The town is at the foot of the hills on the right bank of the Nam-hsa, about  $\frac{1}{2}$  mile from it. The houses number about 60 and are all built of soft brick; there are no regular fortifications to the town, but each group of 5 or 6 houses is generally surrounded by a mud wall 5 to 8 feet high, and 1 or  $1\frac{1}{2}$  feet thick, and some of these walls are loopholed, and could be defended. The palace is a substantial building divided into two court-yards and surrounded by a wall 12 feet high. To the south and east the town is surrounded by gardens and groves of trees and the ground is cut up by nullahs, so that it would be easy to approach under cover on these sides. To the west, half a mile of open paddy-fields, crossed by a paved road 3 yards wide, separate it from the village of Tung-mu, so that in an advance from this side it would be better before arriving at Tung-mu to turn up to the left to the foot of the hills, and attack the town from the north where the lower spurs of the hills command it, and where the ground is somewhat broken so as to afford cover.

*Communications.*—From Ho-hsa roads to Bhamo lead through Nampok, A-shang, and Ho-tung which is near Ma-t'ang

(Matin) and also *via* La-hsa, Warra Bum, and Sinlum Kaba. The road to T'êng-yüeh leads through Möng-hüm and Möng-hti, while from Möng-hüm a road branches off to the east through Möng-yang to Möng-hkwan and Chê-fang. The road to Möng-wan town ascends the hills from Man-hai, and descends into the eastern end of the Möng-wan plain. Möng-mow can be reached through Möng-wan town, or by a road ascending from the La-hsa village of La-wang and crossing Loi Pang-kum into the western end of the Möng-wan valley. To La-hsa there is a good road 2 or 3 yards wide, paved with large flat stones most of the way. The road to Man-waing ascends from the La-hsa village of Mannoi, and descends into the Möng-na valley at Semau. The road to Lung-ling crosses the Nam-hsa below Se-kow and proceeds east by north, crossing the Shwe-li below Man-heng. [Davies, 1894.]

HO-K'OU—*See* Lao-Kai.

HSI-O-HSIEN,—LAT.  $24^{\circ} 11'$  N.; LONG.  $102^{\circ} 28'$  E.; HEIGHT 5,450 feet.

*The town.*—The town is situated on the right bank of the Ch'ü-chiang Ho, just above its junction with a small tributary, the Hsi-o-Ho. The hills bounding the stream, which are about 400 feet high, open out at this point to form a small basin 1 mile square, the town being situated in the centre. The basin itself is composed of poor soil and is principally under poppy cultivation. The town is oblong in form, 430 yards by 300, whilst the perimeter is 1,250 yards. It is enclosed by a wall of stone blocks 8 feet high, surmounted by a mud wall 8 to 10 feet high and  $1\frac{1}{2}$  feet thick. This wall is crenelated and loop-holed, but is evidently only a later addition to the existing stone wall, as on the inside the earthen parapet is only 2 to 4 feet high, revetted with stone and with an unpaved banquette  $3\frac{1}{2}$  yards wide. Owing to the lowness of the parapet, the embrasures and loopholes pierced in the upper wall are useless for defensive purposes. The wall is entirely surrounded on the outside by a swampy ditch 5 yards wide and 1 foot deep, which would form little obstacle to assault. The wall is pierced on each face by gateways closed by double doors of wood 6 inches thick with a thin exterior plating of iron. Entrance is given by bricked-in tunnels 8 yards long and  $3\frac{1}{2}$  yards wide. The gateways are not flanked by traverses, but the east gate is

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faced by a short length of wall similar to those placed outside temples to ward off evil spirits. The main street of the town connects the east and west gateways. It is paved with stone, 6 yards wide and lined with poor shops. The remainder of the interior space is thinly built over with small houses, interspersed with patches of poor cultivation. Outside the east and west gateways are small suburbs containing a few shops, and in the western suburb are several miserable mule-inns.

*Point of attack.*—The town is practically commanded on all sides by hills at 1,500 yards range. The advance from Hsin-p'ing Hsien would be somewhat risky, as the road before debouching on the Hsi-o plain runs through a narrow defile between high hills for nearly nine miles.

*Government.*—The *Hsien-kuan* is under the *Fu-kuan* of Lin-an.

*Trade and supplies.*—The town owes the little importance it possesses to the presence of iron mines in the neighbourhood. Of these the principal are at Cha-ho, Lu-nang, Hung-hsin-kai and Sh'ih-tzü-p'o. Other trade is merely of a local character and supplies could only be obtained in small quantities. Probably about 250 mules or ponies could be procured from the iron traders in the vicinity.

*Camping-grounds.*—Camp could be formed anywhere in the poppy fields in the Hsi-o basin.

*Telegraph.*—The telegraph line from T'ung hai to Ssü-mao T'ing passes outside the south face of the town, but there is no office established here.

*River.*—The Ch'ü-chiang Ho is 24 yards wide,  $1\frac{1}{4}$  feet deep with gentle current, pebbly bed and good approaches. It is crossed 200 yards east of the town by a roofed-in stone bridge of 4 spans, 72 yards long with 12 feet roadway. Flooring of rounded timbers and planks overlaid. Stone piers and buttresses. Height above stream 18 feet.

*Communications.*—The town is situated on the main road from Yün-nan Fu to P'u-êrh Fu via Yüan-chiang Chou. [Fraser, 1900.]

HSIA-KAI-DIN *See* Chen-lawt.

HSIA-KUAN.—LAT.  $25^{\circ} 35'$ ; LONG.  $100^{\circ} 6'$ ; HEIGHT 6,650 feet.

A town lying 8 miles south of Ta-li Fu containing about 1,000 houses and the residence of most of the principal merchants of Ta-li Fu. It is also of some military importance as it guards the pass which leads through the hills to the west into the Ta-li Fu plain. This pass is a narrow valley about 11 miles in length, down which the Hsia-kuan Ho, which is the outlet of the Erh Hai lake runs into the Yang-ki river. This stream is from 15 to 30 yards wide, probably 2 to 4 feet deep, with a tremendous current rushing down a stony bed: its current is so strong that it would be difficult, if not impossible, to ford it anywhere. Coming from Yang-ki the pass is entered near the mouth of the Hsia-kuan Ho, but considerably above the level of it at the village of Pin-p'o. From here the road goes up the right bank, but a good deal above the level of the water till the stream is crossed by a wooden bridge 3 miles from Pin-p'o. For the rest of the way the main road goes up the left bank, for the most part considerably above the river, by a path cut out of the hillside, but there is also a less used path going up the right bank of the river all the way, not however passable for mules owing to its narrowness. There is not much flat ground at the bottom of the valley, though there are a few villages and a little cultivation on the hillsides. The hills on either side rise perhaps 2,000 feet on an average above the river and are very steep, in some places precipitous but for the most part just accessible. They are bare in places, and in other places are covered with scrub jungle 6 or 7 feet high. The end of the pass is about  $\frac{3}{4}$  mile west of Hsia-kuan, and here for about 500 yards the pass narrows in very much and has precipitous sides. Here it is closed by two stone archways one blocking the path on each bank of the stream, while on the right bank there is a stone fort 30 yards square in addition. From this fort a stone wall 3 or 4 feet thick and 15 feet high runs along near the right bank of the river to the town of Hsia-kuan, and continuations of it form the walls which run along each bank of the river through the town. About a quarter of a mile along the wall from the small fort is another larger fort now tumbling to pieces, presumably intended to hold the garrison of the place. The Hsia-kuan Ho where it passes through the town runs in two channels, each crossed by a stone bridge, the larger channel being about 40 yards wide and navigable for large boats. Walls run along each bank of the river here, and on the island between

the two channels there is also a stone fort. Besides this the suburb to the south of the stream is enclosed by a mud wall 20 feet high and 2 feet thick. The higher-lying part of the town on the right bank is not enclosed by a wall on the north, and the ground here commands the walls along the river banks, the fort on the island, and the walled suburb. The archways and fort in the pass would be very effective in stopping an enemy who came along either of the paths, but as the sides of the pass only become precipitous for the last 500 yards, the place could easily be turned by moving off up the hill-side (which is steep but not inaccessible),  $\frac{1}{2}$  mile or more short of the narrow place. This could be done on either bank, but it would be most effective to come by the path up the right bank, as by turning off uphill on this side the whole of the wall would be taken in reverse and the high-lying part of the town could be entered on its unprotected side. From here the fortified part of the town would be commanded, and the retreat of the garrison on Ta-li Fu cut off.

*Government.*—There is no official of any rank at Hsia-kuan. The part of the town on the right bank of the Hsia-kuan Ho is under the Ta-li *Hsien-kuan*, and the suburb on the left bank is under the Chao-chou *Chou-kuan*.

For supplies, transport and communications see under Ta-li Fu. [Davies, 1895.]

HSIANG-TA.—LAT.  $24^{\circ} 29'$ ; LONG.  $98^{\circ} 46'$ ; HEIGHT 5,800 feet.

A small Chinese district under Lung-ling.

The plain is about 3 miles long and from  $\frac{1}{4}$  to  $\frac{1}{2}$  mile wide with the Hsiang-ta Ho (6 yards wide, 1 foot deep) running down the middle in a generally easterly direction. The valley is well cultivated and includes about 15 villages, one of the largest being Nang-sai above the junction of the Hsiang-ta Ho and the Hsi-pa Ho. Nang-sai contains 100 houses and several substantial temples and inns. Being situated in a kind of pass above the point where the route *via* Mao-tsao-chai joins the direct route from P'in-ka, the village commands this portion of the route. The district is not a rich one, but admirably suited from its position for a sanitarium. Several villages, notably Yin-po and San-

chia-ts'un, are substantially built. Yin-po flanks the main route with a brick and stone wall 8 feet high.

*Supplies.*—Very few supplies are obtainable but a certain amount of wheat is grown.

*Camps.*—Scattered accommodation could be found in the temples for 2 battalions. Open camps are difficult to procure, as the land is under irrigation. To the east up a small valley near to and behind the village of La-mêng-chai, there is camp accommodation on flat-topped knolls and low slopes.

*Communications.*—Hsiang-ta is on the road leading from Möng-hkwan to Möng-cheng and the east of the Salween *via* Han-kuai ferry. Roads lead to Lung-ling, and to Chén-an-so direct and thence to La-Mêng ferry. [Davies, 1898. Walker, 1899.]

HSIAO-KUANG-HSI *See* Kuang-hsi-chou.

HSIN-P'ING HSIEN.—LAT.  $24^{\circ} 7'$  N.; LONG.  $102^{\circ} 11'$  E.; HEIGHT 5,425 feet.

The town is situated  $\frac{1}{2}$  mile from the left bank of the Hsin-p'ing Ho (a small stream 10 yards wide and shallow) in a basin bounded by high hills,  $1\frac{1}{2}$  miles wide from north to south and 4 miles long. This basin, which is composed generally of poor soil, is dotted with small villages, each surrounded by a small patch of cultivation. The walled town is oblong in shape 330 by 275 yards with its longer axis running from north to south. It is surrounded by a crenelated wall of stone blocks, 15 to 20 feet high on the outside and 2 feet thick in good repair, pierced between each embrasure with a row of loopholes to allow men to fire kneeling. It is backed on the inside by a parapet of earth revetted with stone, and paved on the top in places. The average thickness of the parapet is 12 feet. Each face is pierced with a gateway surmounted by guard-houses, two-storied in the case of the south gate and one-storied and in bad repair on the other faces. Entrance is given through bricked-in tunnels 13 yards long and  $3\frac{1}{2}$  yards wide, closed with the usual wooden double-doors, 6' thick, with thin iron plating on the outside. The interior space is thinly built over, particularly in the northern quarter. Paved roads connect the various gateways, lined for the most part with small private houses, and a few *Yamens* and temples. Abutting on the southern face of the town is the business

quarter, which is enclosed by a wall of sun-dried bricks 16 feet high, with no ditch or interior parapet, and slightly loop-holed on the west face only. The interior space is intersected with paved streets 7 yards wide, lined with poor shops. The southern and western portions of this quarter are thinly built over, flat-roofed mud houses preponderating. In the northern quarter, near the south gate of the walled town lie the barracks. On the east side, connected with the business quarter by a stone causeway 90 yards long, lies a small suburb containing several small mule-inns. The town is surrounded on all sides by poorly cultivated paddy-fields.

*Government.*—The *Hsien-kuan* is under the *Chou-kuan* of *Yüan-chiang*.

*Point of attack.*—The town lies at the foot of a high range of hills bounding the north of the basin. The slopes consist of poor rocky soil dotted with fir trees and the town is commanded on the north at short range. The lines of approach from the east or west are easy and would form no obstacle to advance. From the south it is commanded at 1,500 yards range.

*Supplies.*—Supplies of a poor description might be obtained in small quantities, the trade being merely local. Possibly 100 mules or ponies might be found in the vicinity.

*Camping-grounds.*—There is extensive accommodation in the basin itself and water from the *Hsin-p'ing* Ho and from numerous small streams.

*Communications.*—The town lies 2 stages to the west of the main road from *P'u-êrh* Fu to *Yün-nan* Fu. [Fraser, 1900.]

HSIP-SAWNG-PANNA.—A name given to a group of eleven Shan districts in the south-west corner of *Yün-nan*.

The districts are:—

1. Möng-wang.	7. Yi-pang.
2. Cheng-tung.	8. Yi-wu.
3. Pu-teng.	9. Möng-la.
4. Wu-teh.	10. Möng-long.
5. Möng-wu.	11. Möng-chen.
6. Liu-shun.	

The first three are under the *Hsien-kuan* of Ning-érh which belongs to P'u-erh. The 4th and 5th were never properly occupied by the Chinese and have become French territory. The remainder are under the jurisdiction of Ssü-mao.

The districts are also nominally under the Keng Hung *Sawbwa*, but for many years he has maintained no authority over them.

Each Panna is sub-divided, and ruled by " *Tsung pa's*" who have the courtesy title of " *T'u-ssü*." The Chinese have also conferred on these officials subordinate military rank. The " *T'u-ssü*" of a Panna has the hereditary rank of *Ch'ien-tsung* or Sub-Lieutenant in the Chinese Army.

The Chinese maintain a very nominal hold over their Panna, as malaria is so rife that Chinese officials will not live there longer than obliged. [F. W. Carey, 1899.]

HSÜAN-WEI CHOU.—LAT. 26° 14'; LONG. 104°; HEIGHT 6,850 feet.

The plain is about 18 miles long, irregular in shape and averages 2½ miles in width north of the town, and about a mile less south of the town. The soil is poor. It is watered by a stream 15 yards wide and fordable, flowing from south to north.

The town lies near the foot of the hill to the west of the plain. It has two walls; the outer is nearly square, measuring about 1,300 yards each side. It is made of mud, 20 feet high and 2 feet thick with a parapet 15 feet high and 3 feet thick, forming a banquette behind it. The inner wall measures about 650 yards on each face. It is 20 feet high, built of large blocks of stone with a parapet 15 feet high and 20 feet thick, forming a banquette. On the east the inner and outer walls coincide, the inner wall having been that of the original town, and outer wall built later. The inner wall has four gates, one in the middle of each face, the outer has five, there being one in the south-west corner as well as in the centre of each side.

The main streets connect the four gateways of the inner town. These outer and inner *enceintes* are well filled with houses, the total number being about 1,000. There are no suburbs.

*Point of attack.*—The town is commanded at a mile range from a spur to the south-south-west.

*Trade.*—Caravan trade is small, the principal industry being coal, which is largely found in the neighbouring hills. There is also a considerable trade in cured hams.

*Supplies and transport.*—The plain is poor, but fair supplies of the ordinary kind can be obtained. Fairly large quantities of mules are procurable, and in the plains carts are used for farm purposes. There is a cart road south to Sung-lin, but carts cannot go beyond the plain northwards.

*Government.*—The *Chou-kuan* is subordinate to the *Fu kuan* of Ch'ü-ching.

*Communications.*—The town is on the main road Yün-nan Fu to Chung King via Wei-ning Chou. [Davies, 1898.]

Intermediate office on the Yün-nan Fu Lu-chou telegraph line.

HUANG-TS'AO-PA.—LAT.  $24^{\circ} 41'$ ; LONG.  $98^{\circ} 47'$ ; HEIGHT 6,000 feet.

*N.B.*—There is another town of this name in KUEI-CHOU and a village near Ssü-mao.

A township in Lung-ling,  $8\frac{1}{2}$  miles north-east of the town on the road to La-mêng ferry. It consists of five small villages, which are situated round the edges of a valley, elaborately terraced in fields and watered by a small tributary of the Shwe-li.

The valley lies north-east and south-west, is about 2 miles long by  $\frac{3}{4}$  mile wide, and bounded by bare or fir-clad hills, low to the south, high to the north.

Westward the hills form an ascending plateau. The upper portion of the valley is very rocky and gives rise to sulphurous springs. The villages are very poor, paddy and opium being the only supplies. There are a few cattle, but hardly any ponies.

There is no headman, the township being administered direct from Lung-ling. Guides and supplies are, therefore, often hard to obtain.

*Camp accommodation.*—Camp could be formed for two brigades if the fields are not under irrigation, otherwise round the edges of the plain near the villages. [Walker, 1899.]

HUNG-TING.—See Möng-ting.

HU-SA (see HO-HSA.)

K'AI-HUA FU.—LAT.  $23^{\circ} 20'$  N.; LONG.  $104^{\circ} 18'$  E.;  
HEIGHT 4,375 feet.

*The town.*—The town lies on the right bank of the Ch'ing Ho or Clear river, in a bend which encircles it on all but the west face. The valley which runs from north-west to south-east is 2 miles wide at this point, being bounded on the east by a range of bare hills 600 feet high and on the west by a similar range, merging on the south-west into a jagged chain of limestone peaks. The plain is studded with villages and is largely under cultivation. The town itself is in the form of an irregular triangle; the base, running from west-south-west to east-north-east, has a length of 1,000 yards, the perpendicular is 500 yards long and the total perimeter 2,520 yards. The town is surrounded by a brick wall with stone foundations, 24 feet high and 2 feet thick, in good repair. It is crenelated and has one tier of loop-holes to allow of men firing kneeling. On the inside it is backed by a parapet of earth 20 feet high topped by a paved banquette 5 yards wide. The wall has no exterior ditch. It is pierced by four gates, roughly at the points of the compass. Each gate is surmounted by a two-storied brick guard-house, which, in the case of the south gateway, is loop-holed and contains a garrison of 20 men. Entrance to the town is given through bricked-in tunnels 12 yards long and  $4\frac{1}{2}$  yards wide. The gateways are closed by wooden folding doors 6 inches thick, with thin exterior iron plating. Paved streets connect the various gateways, and these are lined with small shops, but the remainder of the interior space, except in the north quarter, is thinly built over. The business quarter of the town lies outside the wall adjoining the north-west face. This consists of one long paved street 6 yards wide, thickly lined with prosperous shops. Adjoining this quarter and skirting the west and south-west faces are small suburbs composed of poor houses. Except on the faces above-named the ground surrounding the town is open and largely under vegetable cultivation. On the west is a large marsh spanned by a stone causeway 200 yards long and 8 yards wide, by which the town is approached from the north-west.

*Point of attack.*—The town is commanded at 1,000 yards range by a spur on the left bank of the river running down from a conical hill south-east of the town. It is also

commanded at artillery ranges by the heights to the north-east. The advance from the north-west is easy and the river can be crossed at hip-deep fords anywhere in the vicinity of the town in the dry season.

*Government.*—The *Fu-kuan* is subordinate to the *Tao-t'ai* of Mêng-tzu, who holds the rank of *K'ai kuang-tao* or Intendant of the south-west frontier of Yün-nan. There are several minor civil officials in the town.

*Supplies and trade.*—Although off the main trade routes a good deal of merchandise arrives at the town *via* Lao-kai and Mêng-tzu. Amongst many French articles in the shops, dynamite cartridges and fuzes are freely offered for sale. The French *piastre de commerce* is eagerly sought after by merchants in preference to Chinese silver. Supplies of the usual kind are procurable in considerable quantities, and probably 600 or 700 mules and ponies could be obtained in the vicinity.

*Telegraph.*—The telegraph office is in the business quarter of the town adjoining the north gate. On the west, the town is in communication with Yün-nan Fu *via* Mêng-tzu Hsien and T'ung-hai, and through the latter station with P'u-êrh Fu and Ssü-mao T'ing. On the east the line passes through Kuang-nan Fu and proceeds thence *via* Pai-sê T'ing and Nan-ning Fu to Canton.

*River.*—The Ch'ing Ho or Clear river is 36 yards wide, and from  $2\frac{3}{4}$  to  $3\frac{1}{4}$  feet deep, with moderate current and firm banks. It is fordable throughout for men and is spanned where the several main roads cross, by substantial bridges of stone with 16 to 18 feet roadway. [Fraser, 1900.]

**KAN-AI.**—LAT.  $24^{\circ} 47'$ ; LONG.  $98^{\circ} 8'$ ; HEIGHT 2,850 feet.

Also called Möng-na and Se-kow by the Shans, Chiu-ch'êng by the Chinese, and Maing-la by the Burmese.

On existing maps it is spelt Möng-la, and it is occasionally so-called, as among Chinese-Shans there is much confusion between the letters, "n" and "l", but Möng-na is the correct and the usual pronunciation. A Shan State on the Ta-ping between San-ta and Möng-hti (Nan-tien).

*General description.*—The plain in which the Shan inhabitants of the State live runs roughly from north-east to south-west, and extends down the left bank of the Ta-ping from 7 or 8 miles above the capital, which lies at the junction of the Nam-hti and Ta-ping, down to where the river enters a defile below Man-waing, a length of about 25 miles; on the right bank the State extends for 8 or 10 miles from the north-eastern end of the valley down to where a low spur from the hills on the west divides it from San-ta, the lower part of the valley on this side of the Ta-ping being San-ta territory.

Up the Nam-hti the plain extends for some 7 miles, gradually narrowing. The average breadth of the plain down the Ta-ping is about 4 miles, 2 miles on each side of the river. The State, except where it borders on San-ta, which lies lower down on the right bank of this part of the Ta-ping is surrounded by hills. The Nam-hti and Ta-ping both enter the plain through narrow defiles, and the Ta-ping leaves it by a long defile which extends to where the river enters the Irrawaddy valley above Myothit.

*Inhabitants.*—The inhabitants of the plain are Shans, but there are some Chinese shopkeepers and traders in the capital, and in Man-kwe and Nawng-sang (Lung-chang).

The hills to the east of the northern part of the State on and near the road to Möng-hum are inhabited by Chinese. But to the south of these more towards Ho-hsa there are Kachins, and the hills to the east and north-east are also inhabited by this tribe. There are also a few Palaungs scattered about in the hills.

*Boundaries.*—To the east Möng-na is separated from the Möng-hum district of Möng-hti by the Ta-ping-Shwe-li watershed; to the south-east and south the Ta-ping Nam-hsa watershed divides it from Ho-hsa and La-hsa. The Ta-ping river forms the boundary between Möng-na and San-ta in the lower part of the valley, but in the upper part Möng-na territory extends to both banks, and the boundary is a spur which runs right down to the river from the hills to the west about 3 miles above the capital of San-ta. To the north-west it joins San-si, and to the north touches territory directly under T'êng-yüeh. To the north-east, on the right bank of the Nam-hti, Möng-na territory extends to the end of the

plain only, Maw-hpu (Mufak) being directly under T'êng-yüeh; in the same direction on the left bank of the Nam-hti the Nam Cheh-kung divides Möng-na from Möng-hti.

Though these are, roughly speaking, the boundaries of the State, yet there are some Shan villages actually in the Möng-na plain on the left bank of the Ta-ping belonging to other States. These are Hwe-kwi, Nao-tawng, Htang-sang, and Man-heo, all close together nearly opposite Man-waing; and Ving-maü and Nawng-him higher up the valley opposite the town of San-ta which belong to San-ta; Semu and Nawng-kying in the lower part of the valley, and Man-sang and Hsapaw in the upper part, which belong to Ho-hsa. These latter villages were given to the Ho-hsa *Sawbwa* as a reward for helping the Chinese in some fighting they had against Möng-na 30 or 40 years ago.

*Government.*—The State is under a Shan *Sawbwa* who pays tribute to the Chinese official at T'êng-yüeh. The Shan villages are grouped into 10 districts, each under a *kang*. The headquarters of these districts are at Kying-ngün, Pying-u, Nawng sang, Lai-pyet, Sang-lin, Na-yawn, Ho-la, Man-noi, Na-lao, and Man-tan.

*Trade.*—In Möng-na no trade is done with pack-bullocks. The greater part of the trade with Bhamo is done by men on foot carrying baskets. There are some Chinese and Shan mule-traders in the capital and in Semu and other villages.

A little trade also goes up and down the river between Möng-na and Man-waing.

There is, however, very little trade from Möng-na to other places though a lot of cotton and other things pass through from Burma to China. Most of the surplus paddy and rice is bought at the different bazaars by Kachins, and by men from Ho-hsa and La-hsa. Ducks and chickens are the chief things brought into Bhamo, while dried fish, salt, needles, thread, and cotton cloth are taken back.

*Supplies.*—Large supplies of beef, paddy, and rice could be got in Möng-na, pigs, chickens and ducks are plentiful, and goats are to be got in the hills.

There are bazaars held every five days at the capital, and at Chen-nawng, Se-kow, Mankwe, Sang-lin, Nawng-wo, Nawng-sang, Semu, Semaü, Man sang and Man-hseng.

*Transport.*—There are no pack bullocks in the State. Large numbers of coolies come from Möng-na into Burma to work every year, and coolie transport would probably be easy to get.

There are mules at the capital and at Semu, and ponies in some of the villages.

Considerable numbers of boats and rafts could be got in the valley, as there are boats in most of the riverside villages.

*The Ta-ping and Nam-hti in Mong-na*—The Ta-ping enters the Möng-na plain by a gorge,  $\frac{1}{2}$  mile long and 30 yards wide in the narrowest place; above this gorge it is a clear stream with a broad bed, and below it again opens out. Where it runs through the plain its bed varies from 300 yards to nearly  $\frac{1}{2}$  mile in width, but this bed is only filled with water in the rains, and from January to June the river is fordable for men in most places, being about waistdeep at the fords. It is not, however, shallow enough to allow of mules crossing without wetting their loads, and these latter are taken across by boat, while the animals swim.

The following are the principal ferries: Man-naung, Hola-Man-hkang, Se-kow-Man-mun, Man-sang-Na-ho-lem, Nawng-mim Nam-noi, Nawng-sang-Pa-chem, Hang-pang-Ho-yin, Pying-u-Man-hai, Pan-hseng-Na-pying, Nawng-hti-Chen-kang, Hwe-kwi-Man-ving, and Nawng-hkang-Hang-kang.

The river is navigable from Möng-na to Man-waing for rafts and boats, but boats cannot pass through the defiles which bound the ends of the plain.

*The Nam-hti* only runs through Möng-na territory for 5 or 6 miles between the mouth of the Nam Cheh-kung, and the junction of the Nam-hti with the Ta-ping. It is a smaller river than the Ta-ping, and is fordable in the dry weather, but has to be crossed by boat in the rains. It is crossed by ferry at Möng-na-Nah-seng, and above this from Möng-na to Haiseng.

It enters the Möng-na valley by a narrow gorge, and above this it is not navigable.

*Town of Möng-na.*—The town is situated near the north-east end of the plain between the Nam-hti and Ta-ping near the junction of these two rivers. It is close to the Nam-hti, but about a mile from the Ta-ping. It is built in an oblong shape,

600 yards long by 300 yards wide. It is surrounded by a brick wall about 9 feet high and 2 feet thick, which, however, is not kept in repair and is full of breaches. The *Sawbwa's* palace is just inside the north wall near the centre.

The bazaar and Chinese quarters are at the east end of the town.

The town is entered by four gates—one in the west side close to the south-west corner; two in the north side, one near the north-west corner through which the San-si road passes, and the other near the north-east corner which leads to a well close outside the town; and one gate on the east side which leads to the ferries across the Nam-hti, on the roads to Möng-hti (Nan-tien) and Man-waing. There is no gate on the south side.

The town is on some slightly rising ground at the foot of the hills which rise to the north of it. On the east and south it is surrounded by paddy and on the west by open grass land.

The town contains 500 or 600 houses, built of soft brick generally enclosed by a brick wall or paling, divided from each other by narrow paved streets. Outside the walls there are a good many houses forming suburbs to the town.

*The old town.*—Called “Chiu-ch'êng” by the Chinese and Se-kow by the Shans. It is about 2 miles south of the new town, and is on the main road between Bhamo and T'êng-yüeh. It measures about 350 yards by 200 yards, contains about 400 houses inhabited by Chinese and Shans, and is surrounded by a mud wall about 8 feet high which has several breaches in it. Joining the town to the west is a *serai* measuring 120 yards by 80 yards. Most of the Chinese traders live in the old town, as the new town lies off the main trade route.

*The fort.*—The fort lies about 100 yards from the southern entrance to the old town. It measures about 150 yards each way, and has a tower at each corner for flanking fire, placed 15 yards outside the fort. It has a gate on the south. The walls are made of soft brick, 12 feet high and loopholed and surrounded by a wet ditch. The fort is built on ground lying 40 or 50 feet above the paddy plain level. To the north its fire is masked by the old town, but to the west, south and east it commands the ground pretty well, except that there is some dead ground caused by the steep bank which to the south-west divides the higher ground from the paddy plain

level. Thus troops advancing from this direction would be exposed to fire at first, but would at 150 yards from the fort be quite sheltered by this bank from its fire. From this bank a *nulla* runs towards the fort by which a still closer approach could be made, fairly well covered from fire. Coming along the main road from Man-waing, the fort can be first seen from Ho-la, about 2 miles off. To the south-east the fort is commanded from hills within a mile.

*Communications.*—Möng-na is on the main trade route leading from Bhamo to T'êng-yüeh, and there are mule roads leading from it to all the neighbouring districts and states. The Ta-ping also is navigated by boats and rafts between Möng-na and Man-waing. The direct road from Möng-na to Man-waing does not lead through San-ta, but keeps down the left bank of the Ta-ping till nearly opposite Man-waing.

The road to San-si crosses the Ta-ping in the Möng-na plain and keeps along the hills on the right bank of that river till it reaches the San-si valley. The main road to San-ta crosses the Nam-hti and leads down to the left bank of the Ta-ping till it crosses it at Man-sang, but there is also a road crossing the Ta-ping at Ho-la and leading down the right bank to San-ta.

The main road to Möng-hti (Nan-tien) keeps up the right bank of the Nam-hti till it crosses it by an iron bridge 2 miles below Möng-hti; it can also be reached by crossing the Nam-hti at Möng-na and going up its left bank, fording the Nam Cheh-kung, which, however, after rain becomes a torrent and cannot be forded or crossed by boat, and there is no bridge. The road to Ho-hsa and La-hsa descends the valley to Semu and then crosses the hills to Ho-hsa, or to the village of Man-noi in the La-hsa valley. The road to Möng-hkwan and Chê-fang goes through Möng-hüm, Möng-yang, and Möng-chi. The road to Möng-wan and Möng-mow passes through Ho-hsa. [Davies, 1894.]

KENG-HUNG.—LAT.  $21^{\circ} 50'$ ; LONG.  $101^{\circ} 9'$ .

A Shan town on the right bank of the Mekong, and the head of a large district, including the Hsip-sawng Panna (which see).

The town consists of about 200 houses, scattered over at least  $\frac{3}{4}$  mile in extent. It stands, facing north, at the end of a low ridge, which juts out into the valley of the Mekong.

The end of this low ridge is divided by four small valleys, in each of which there are 40 or 50 houses on high ground. On a ridge between these valleys stands a large brick monastery, and a few houses, including the *Sawbwa's* palace.

The town and district have a bad reputation for fever, and consequently few Chinese are to be found.

Supplies in fair quantities are obtainable, and a considerable number of pack bullocks, as well as a few ponies.

There is a ferry-boat at the town, and a few small fishing craft are also available. [Burrows, 1891.]

KOK-LIO.—See Lao-kai.

KÖNG-MA (KÊNG-MA).—LAT.  $23^{\circ} 33'$ ; LONG.  $99^{\circ} 24'$ ; HEIGHT 3,850 feet.

One of the largest Chinese Shan States.

The town lies in a plateau some 15 miles long from north to south and 7 miles across. To the east of the plateau, but separated from it by low hills, runs the Nam-hpyit, one of the sources of the river which lower down becomes the Nam-hsung or Hsiao-hei Chiang. Two smaller streams, the Nam-law and Nam-hkoi, run through the Kêng-ma plateau in a south-easterly direction and find their way through gaps in the low hills into the Nam-hpyit. It is along these two streams and their small tributaries that most of the villages are situated, as they are able here to cultivate narrow strips of irrigated fields. The greater part of the plateau is covered with fairly short grass. It undulates gently and is not much cultivated.

*The town.*—The town stands on elevated ground, about 600 yards from the right bank of the Nam-hkoi. It contains about 300 houses built of mud, some with thatched and some with tiled roofs. The *Sawbwa's* palace is in the middle of the town, and a new palace is just being built alongside the present one. The town contains five large *pôngyi kyaungs*, and there are large camping-grounds all round it. There is no wall.

The water-supply is from three or four wells in the town while the Nam-hkoi is close by.

*Supplies and transport.*—Supplies of the ordinary kind could be obtained in considerable quantities, and good grass is to be

got in April and May. The *bazaar* sheds are just outside the east gate, and a *bazaar* is held here every five days.

Transport is not to be got in any large numbers, as there are practically no traders in the place, though there are probably men who own five or six mules or bullocks and do a little trade occasionally. Chinese traders from Pang-tong, Yung-ch'ang and other places often visit Kêng-ma in the cold season with mule caravans.

*Government.*—The State is under a Shan *Sawbwa*, who pays tribute to the Chinese official at Shun-ning.

*Communications.*—From Kêng-ma to Kun-long the road goes through Mêng-ting. To Möng-cheng there are two roads—*via* Mêng-chien and *via* Mêng-hsa; the former is probably rather the shorter. To the north the road to Mêng-sa goes on to Wan-nien chuang whence roads branch off (1) to Mien-ning, (2) to Yün Chou and Shun-ning. To the east there is a road to Mêng-mêng, and from there on to P'u-êrh, Ssu-mao or Wei-yuan. To the south there are roads to Mêng-sung and to Mêng-ko. The road to Mêng-ting follows the Mêng-chien road for a long way and is very roundabout, but there is said to be no more direct route. [Davies, 1895.]

KU-YUNG KAI.—LAT.  $25^{\circ} 20'$ ; LONG.  $98^{\circ} 19'$ ; HEIGHT 6,000 feet.

An extensive district in T'êng-yüeh in the drainage of the Ta-ping within four marches of Sa-don in British territory.

It lies in a plain about 12 miles long which at first consists of a succession of valleys running one into another containing the circles of Huang-ts'ao-pa, Upper Chin-ku and Lower or main Chin-ku in succession from the south. The main plain extends from Lower or main Chin-ku to the circle of Sha-hua-t'ang, situated on the north-west termination of the plain which is 3 miles across at its widest, and extensively cultivated with neatly fenced-in fields.

The district is permeated throughout by the Ku-yung Ho and traversed by the route from T'êng-yüeh. It is populous, both the eastern and western edges of the plain being bordered by villages of which the principal ones in addition to Huang-ts'ao-pa and Chin-ku are Hsi-pei-chai, Fan-chia-chang, Shang pu-li and Sha-hua-tang. The others are small and unimportant.

*The town*—Sha-hua-t'ang represents the town of Ku-yung. It is situated at the point where the Ku-yung Ho pierces the range on the western side of the plain to join the Ta-ping.

It contains about 250 houses, several substantial temples and a *yamen* used as barracks. It bears an air of decay and is filthily dirty. It is unwalled, but is entered from the northwest by a gateway surmounted by a loop-holed stone guard house capable of holding half a dozen men at most.

*Point of attack*.—It could be easily attacked from the route from Sa-don *via* the Kao-ling pass by leaving the route just after crossing the river and ascending the hills which command the town on the west, the spurs from which run right down on to the *yamen*.

*Camps*.—The ordinary stages through the district coming from the north-west would be—

- (1) Sha-hua-t'ang.
- (2) Chin ku.
- (3) Huang-ts'ao-pa.

At (1) there is excellent camp accommodation on level grass, on the right bank of the river one mile west of Sha-hua-t'ang, and on the route towards Sa-don where a brigade could camp. Small and unescorted parties should seek accommodation in the temple used as a school, or in the *yamen* in Sha-hua-t'ang as the neighbourhood bears none too good a reputation.

At (3) there is scattered accommodation near each village in the circle for 100 men, and for a battalion between the villages of Huang-ts'ao-pa and Liang-t'ai-hsi.

Other camps in the plain on the eastern side are to be found at (1) Sha-pu-li; (2) Fan-chia-chiang, where there is a school house which would accommodate 50 men; (3) Tso-mu-shu, for 100 to 150 men only. Several camps might be found on the western side of the plain which was not examined.

*Supplies* in the shape of paddy, cattle, fowls, pigs, and vegetables should be extensive.

*Trade*.—There is trade with T'êng-yüeh, Hsi-lien, and Ming-kuan while a few Kachins occasionally come down from the frontier range, but there is little through traffic into Burma.

along this route. Ponies are bred here, but they are poor under-sized animals.

*Inhabitants.*—The inhabitants are all Chinese.

*Communications.*—There are routes to Sa-don, to Mai-ku on the Shingaw Hka via Tan-tsa and the Pang Seng gorge and to Mien-kuan via Hsi-lien and T'êng-yüeh. [Walker, 1899.]

KUANG-HSI CHOU.—LAT. 24° 30'; LONG. 103° 39'; HEIGHT, 5,700 feet.

Also called Hsiao-kuang-hsi to distinguish it from the neighbouring province of the same name.

The town is situated in a plain 15 miles long and 2 miles wide drained by a stream which ends at the southern extremity of the plain in a hole in the ground. In the plain are about 30 fair-sized villages and the total population, including the town, is about 25,000. Coal of poor quality is obtained in the hills to the east of the plain.

The town contains several fair inns and about 800 houses, including the suburbs, and has a large *yamen*. It is surrounded by a brick wall 20 feet high, backed by an earthen parapet 30 feet thick. There is a gateway in each face, but not in the centre.

North of the town and within 400 yards of it, rise a dozen stony knolls about 200 feet high which completely command it. Behind these knolls the ground rises to some height. On the west the hills are low, but they rise on the east to 8,000 or 9,000 feet.

There is said to be a large export trade in rice and opium. The town is very centrally situated; roads run north to Ch'ü-ching and to Lo p'ing Chou, east to Wu-tsao, south-west to Mi-lê Hsien and south to Chu-yüan and A-mi-Chou. [Ryder, 1898.]

KUANG-NAN FU.—LAT. 24° 4' N: LONG. 105° 9' E.; HEIGHT 4,515 feet.

*The town.*—The town is situated in a circular basin, having a diameter of about 4½ miles bounded by bare stony hills, rising generally to a height of 500 feet above the plain, and on the

east side about 150 feet higher. The basin is composed of poor soil, thinly cultivated and dotted with small eminences, composed of heavy clay soil and covered with short coarse grass, and in the folds of one of these eminences lies the town. It is in the form of an irregular oblong 1,150 yards, by 740 yards. The perimeter of the town is 3,770 yards. It is enclosed by a crenelated brick wall, 20 feet high and  $1\frac{1}{4}$  feet thick, pierced with a tier of loop-holes to allow of men firing kneeling. On the inside it is backed by a parapet of earth 15 feet high revetted with 1 foot thickness of brick and topped by a paved banquette 3 yards wide. The wall is in good condition, several former breaches having been recently repaired and the renovation of the parapet is now (March 1900) being carried out. In each quarter a gateway is pierced, surmounted by two-storied brick guard-houses, the west and south guard rooms being garrisoned by 10 men each. Entrance is given through brick tunnels 12 yards long and  $4\frac{1}{2}$  yards wide, the gates being closed by wooden doors 6 inches thick with thin iron plating on the outside. 250 yards west of the south gateway, there is in addition a doorway pierced in the wall itself, the parapet being here cut away to allow of a paved road entering the town. The several gateways are connected by paved roads 6 yards wide, lined for the most part with shops, and at the central intersection is the market place near which the most of the principal shops are found. In the south-east corner of the town are situated most of the official residences, the barracks and telegraph office; the remainder of the town is but thinly built over and a good deal of it is under vegetable cultivation. The houses are for the most part of sun dried bricks of a poor description, whilst the inns are unusually poor and dirty. The interior contains several ponds of fairly good water, the largest situated in the north-west corner is pear-shaped, with dimensions of 190 by 100 yards and about 3 feet deep. The town is not surrounded by a ditch. There are small suburbs adjoining each gateway and the remainder of the ground surrounding the town is under cultivation of an inferior sort, whilst a small marsh adjoins the east face.

*Point of attack.*—The town is commanded at point-blank range from a height of 50 to 120 feet on all except the eastern face by the rising ground in the folds of which it lies.

*Government.*—The *Fu-kuan* is under the *Tao-t'ai* of Mêng-tzü who has the title of *K'ai-kuang Tao* or Intendant of the south-west circuit of the Province of Yün-nan.

*Supplies and trade.*—Kuang-nan Fu is on the trade route from Yün-nan Fu to the West River and Canton *viā* Pai-sê, but the bulk of the goods landed from Canton at the latter place proceed northwards to Yün-nan Fu *viā* Huang-ts'ao-pa. At the same time there is always a certain amount of traffic passing through the town, and the usual supplies are obtainable in fair quantities. Probably 300 mules and ponies could be obtained in the vicinity.

*Camping-grounds.*—The basin in which the town is situated, offers unlimited accommodation for troops but water is scarce and camp should be pitched in the vicinity of the two streams which irrigate the plain, one of which passes to the north and the other to the south of the town.

*Telegraphs.*—The town is connected by telegraph with Yün-nan Fu *viā* Mêng-tzu and T'ung-hai, with Canton *viā* Pai-sê and Nan-ning Fu.

*Communications.*—The town is on the main trade route which runs from Yün-nan Fu *viā* Chu-yüan and Ch'iu-pei Hsien to Pai-sê on the West River. Owing to absence of water east of Chu-yüan, this road is not largely patronized by caravans. [Fraser, 1900.]

KUANG-T'UNG HSIEN.—LAT.  $25^{\circ} 10'$ ; LONG.  $101^{\circ} 46'$ ; HEIGHT 6,250 feet.

The town stands in a small plain, measuring about 2 miles each way, with a small stream running through it from south to north, along which there is a strip of cultivation  $\frac{1}{4}$  mile wide, extending for a mile beyond the main plain. The inhabitants of the plain are Chinese.

The town is surrounded by a brick wall 15 feet high, with an interior parapet. It is in bad repair and there are numerous large breaches, the largest being in the west face, and one in the east face close to the gateway.

The town is of irregular oblong shape measuring 700 or 800 yards from north to south and 500 yards along the main street which connects the east and west gates. Nearly all the houses are along the street, which lies nearer the south than the

north face of the town. The north part of the town is thinly built over.

*Point of attack.*—The town is surrounded by low hills, which command it from the north at 400 yards range, and from the south and west at 800 yards.

*Supplies and transport.*—There is scarcely any trade in the place and supplies of food and mules would be small.

*Government.*—The *Hsien-kuan* is under the *Fu-kuan* of Ch'u-hsiung. [Davies, 1898].

KUEI-CHOU—LAT.  $23^{\circ} 30'$ ; LONG.  $105^{\circ} 30'$ .

A considerable town on the eastern confines of Yün-nan, and the residence of a mandarin who rules over the district between Kuang-nan Fu and the border of Kuang-hsi.

The town is built tier upon the tier up the side of a lofty mountain. It is approached from the river by a succession of fine stone steps and archways. The town bears the marks of the Mahomedan rebellion in its battered outlying walls and ruined temples and houses. A few villages are scattered about the neighbourhood. [Colquhoun, 1881; Bourne, 1886.]

K'UN-YANG CHOU,—LAT.  $24^{\circ} 38'$  N.; LONG.  $102^{\circ} 34'$  E.  
HEIGHT 6,680 feet.

*The town.*—The town overlooks the south-west corner of the Tien Ch'ih or Yün-nan lake also known as the K'un-yang Hai, and is built on the extremity of a low saddle which runs down from the main range, 1 mile to the south-west, bounding the Yün-nan plain. The town itself is in the form of an irregular oval having a length of 2,400 yards, and a breadth of 1,050 yards. It is surrounded by a crenelated wall of stone blocks, 20 feet high and 2 feet thick, in good repair, backed on the inside by a parapet of earth 14 feet high, topped by a paved banquette 3 yards wide. The north, west and south sides are pierced in the centre by gateways, and the east face contains two. Entrance is given by bricked-in tunnels pierced through the parapet, 12 yards long and  $3\frac{1}{2}$  yards wide, closed by double wooden doors 6" thick, plated thinly with iron on the outside. On the west side the wall is surrounded by a dry ditch 15 feet deep and a small stream skirts the south and south-east faces. The town, which

contains about 700 houses, has a paved street, running at the foot of the saddle on which the town is built and connecting the north and south gateways. From the main street are several unimportant branches. This portion is well paved and contains numerous shops of the usual pattern. On the rising ground embracing the western half of the town are several temples and *yamens*. The north-east gate leads to a small harbour 300 yards long by 100 yards wide connected with the lake by a narrow channel 10 yards wide. In the harbour are usually to be found about a dozen sailing junks of light draft, each capable of transporting about  $\frac{1}{2}$  company with their kits.

*Point of attack.*—The saddle on which the town lies is surrounded on three sides by paddy fields, and there is no rising ground in the vicinity to command the town. The advance from the south-west through irrigated paddy fields would be difficult and it would be better to leave the Yi-mén road where it debouches on the plain, and skirting north, to advance against the west face; along the spur on which the town is situated a feint attack might also be made through the villages neighbouring the north face.

*Government.*—The *Chou-kuan* is under the *Fu-kuan* of Ch'êng-chiang.

*Supplies.*—There appears to be considerable trade with Yün-nan Fü, the route *via* Chin-ning Chou being the most used. The boat traffic is also a fairly brisk one. The main street is lined with good shops and commerce seems flourishing. The usual supplies in considerable quantities might be relied on and excellent fish from the lake. Probably 150 mules could be obtained in the vicinity without difficulty.

*Camping-grounds.*—Extensive camping-grounds could be obtained in the plain in the fields not under irrigation.

*Communications.*—The town lies off the main road from P'u-êrh Fu to Yün-nan Fu, with which latter town it is in communication by roads running west of the lake *via* An-ning Chou, and east *via* Chin-ning Chou and Ch'êng-kung Hsien. The latter road is more generally used, and is two fair marches long. By boat, Yün-nan Fu can be reached on an average in about 13 hours. [Fraser, 1900.]

LA-HSA.—LAT.  $24^{\circ} 25'$ ; LONG.  $97^{\circ} 52'$ ; HEIGHT 4,500 feet.

Called Latha by the Burmese and occasionally called Hangsha by Shans. The combined States of Ho-hsa and La-hsa are called Möng hsa by the Shans and Maingtha by the Burmese.

A State on the Nam-hsa, a tributary of the left bank of the Ta-ping.

*General description.*—The Nam-hsa valley is here 14 or 15 miles long and some 2 miles wide in the middle, narrowing down to  $\frac{1}{2}$  mile at each end. Its general direction is from east-south-east to west-north-west, and the river runs down the middle of it. The middle part of the plain is all under paddy cultivation, and the villages are spread in an almost continuous line along the foot of the hills which bound the plain on either side. The eastern half of this valley is Ho-hsa, and the western half La-hsa.

The valley is 1,500 feet higher than the adjoining plains of Möng-na and Möng-wan, and both it and the surrounding hills are very bare, except where groves of trees have been planted round villages. The houses are all built of soft brick in the Chinese style. The climate is cold and there is said to be very little fever in the valley.

*Inhabitants.*—The bulk of the population of the plain is a tribe called *Ngachang* or *Chang*. In dress, religion, and customs they resemble Chinese-Shans, but in feature and language they differ from them, and they are probably more nearly allied in race to the Maru and Lashi Kachins, though they have now become thoroughly Shanised. There is also a large Chinese population in the valley, and the La-hsa *Sawbwa* computes the number of houses as 1,000 Ngachang and 800 Chinese. This only includes the houses in the plain; on the hills the population is chiefly Kachin with a few Palaungs. The Chinese in the valley have most of them lived there for some generations, and have somewhat lost the look of their race, so that it is often difficult to tell them from the Ngachangs.

*Boundaries.*—To the west the boundary of La-hsa runs along the Burma-China frontier. To the north-west the Ta-ping divides La-hsa from San-ta, and to the north the Nam-hsa-Ta ping watershed separates it from Möng-na. To the north-east and east it touches Ho-hsa, the boundary being the Nam-hao-kawng which runs into the right bank of the Nam-hsa between Hai-nang and Low-li, and another stream which joins the Nam-

hsa nearly opposite it between Chen-ho and Len-mong. The village of Kang-kyeng, however, which lies east of this line, is under La-hsa, while La-khum, which is to the west of it, is in Ho-hsa. To the south-east and south the Nam-hsa-Nam-wan watershed divides La-hsa from Möng-wan.

*Government.*—La-hsa is under a *Sawbwa* who pays tribute to the Chinese officials at T'êng-yüeh. The villages in the valley are divided into three districts under *kangs* who live at the town of La-hsa, at Man-kyeng, and at La-chi.

*Trade.*—There are no pack bullocks or mules in the State, and what little trade there is, is done by men carrying baskets. The valley is so poor that there are practically no exports and rice is imported into the State from the neighbouring Shan States. Large numbers of men from La-hsa go out for several months in the cold weather into the neighbouring Shan States and the north of Burma to earn money as labourers the products of the La-hsa valley not being enough to support its population.

*Supplies.*—No large supplies could be got, but beef, paddy and rice would be obtainable. Grass is not to be got in the valley in January, and animals are fed on straw. Grass is procurable from near the tops of the surrounding hills 600 or 800 feet above the plain.

There are bazaars held every five days at the capital and at Man-tong.

*Transport.*—There are no pack-mules or bullocks to be got and the only available transport is coolies. There are no boats on the Nam-hsa.

*The Nam-hsa in La-hsa.*—The river where it passes through La-hsa is 20 or 25 yards wide, and 1 or 2 feet deep in January, flowing with a moderate current over a sandy bed. It is fordable throughout the year, but the fords are deep after heavy rain. There are bridges at La-kong-Saph-kröng, Man-tong La-chi and Man-tam-La-wang.

These are foot-bridges, but if in good order they would be passable for animals. *For bridges higher up the river, see under Ho-hsa.*

*The town of La-hsa.*—The town, which contains 80 or 100 houses, is at the foot of the hills on the right bank of the Nam-

hsa, about  $\frac{1}{2}$  mile from it, close to the west end of the plain. There are no fortifications, but the houses are built of soft brick, and each block of five or six houses is usually surrounded by a wall 5 to 8 feet high and 1 or 2 feet thick, which is in some cases loopholed. The ground to the north at the foot of the hills commands the town and is broken up by nullahs and affords the best line of approach for an attack. The paddy plain to the south is commanded by the town, but as the town is built on a steep bank 25 feet above the paddy-field level, there is some dead ground under this bank. To the west is the village of Pang-hso on the same level as the town and 500 or 600 yards from it. To the east are the bottoms of the low spurs which run down from the hills to the north.

*Communications.*—A road from La-hsa to Bhamo goes through Nam-puk, A-shang, and Ho-tung, near Mahtang (Matin), another via Nam-pup, Warra Bum, and Sinlum kaba. To Man-waing the road ascends the hills behind the town of La-hsa, and descends into the Möng-na plain at Man-sang. To Ho-hsa there is a road 2 or 3 yards wide, paved most of the way with large flat stones. The shortest way to T'êng-yüeh lies through Ho-hsa, Möng-hüm, and Möng-hti, and from Möng-hüm a road turns eastwards through Möng-yang to Möng-chi, whence roads branch off to Chê-fang and Möng-hkwan. To the town of Möng-wan the road passes through Ho-hsa and ascends from Man-hai. To the west end of the Möng-wan valley and to Möng-mow there is a road which ascends from La-wang, crosses Loi Pangkum and descends into the Möng-wan plain near Te-hsa.

There is also a route to Bhamo via Pang-sawn. [Walker, 1899].

LAO-CH'ANG. See Wan-tien.

LAO-KAI—LAT.  $22^{\circ} 24'$ ; LONG.  $104^{\circ} 2'$ .

Lao-kai itself is just across the border of Tong-king, but the town of Ho-k'ou which is separated from it by the Nam-hsi is in China. As the whole place is best known under the name of Lao-kai, it will be more convenient to describe the two places together under this heading.

Ho-k'ou is a town of about 500 inhabitants with a mixed population of Yün-nanese, Cantonese, P'u-mans, Shans and Annamites.

It stretches along the left bank of the Red river for about  $\frac{1}{2}$  mile, and runs up the right bank of a tributary of the Nam-hsi for a short distance. About 100 feet above the east of the town are the houses of the Chinese custom officials and of the French Consul. Above these, on a steep spur which runs out from the ranges of hills to the east, is a Chinese fort, which commands the whole of the French barracks and forts in Lao-kai and those across the Red river at Kok-lia.

*Lao-kai* contains about 155 houses, inhabited chiefly by Cantonese and Annamites. It stretches for about  $\frac{1}{2}$  mile down the left bank of the Nam-hsi, and continues for the same distance down the left bank of the Red river. There are a few Chinese shops selling European goods, a few well-built houses and the office of the Commandant of the district. A little above the town is the Commandant's house and above this a small fort, which is said to contain two big guns. It is garrisoned by marine artillery and has an extensive command, but is itself commanded by the Chinese fort above Ho-k'ou.

*Kok-lia* is a village on the right bank of the Red river, exactly opposite Lao-kai. Here are stationed the majority of the French garrison, including two companies of the Foreign Legion and a small force of "*Tirailleurs tonkinois*". The jungle is cleared within 200 or 300 yards of the barracks, and the hills behind are low and covered with scrub, the range becoming steeper two or three miles further back.

The Red river at Lao-kai is about 200 yards wide and not fordable; there are several ferry boats, and the French are building an iron bridge. The Nam-hsi is 100 yards wide with sandy bottom and moderate current. It is generally fordable except in the rains. There are several ferry boats and the French are now throwing a bridge across it (1900).

*Government.*—Ho-k'ou is under the *Hsien-kuan* of W-n-shan. There is also a small Annamite official in the town, appointed at the instigation of the French. Lao-kai is under military jurisdiction. The Commandant is a Major.

*Communications.*—There is a road to K'ai-hua, but the most important communications are by the Red river to Man-hao and Yen-bai.

It is a station on the Tong-king Yün-nan Fu Railway.

From Man-hao to Lao-kai, large boats, 40' or 50' long and 10' wide, ply with cargo. These boats carry about 4½ tons and the journey down stream is usually done in 1½ days, up stream 4 to 10 days. Below Lao-kai stern wheel steamers with 2' draught ply to Yen-bai from May to December and large junks, all the year round. Lao-kai to Yen-bai is one day's steam or 2½ days by boat. Upstream the journey is done in 2½ days steam, and under favourable circumstances 7 days by boat. There is a good, bridged, 7' track down the left bank to Yen-bai (7 marches). [Davies, 1898].

LI-CHIANG FU.—LAT. 26° 52'; LONG. 100° 15'; HEIGHT 8,200 feet.

The town is situated on the eastern side of a small spur dividing two plains which run parallel to each other from north to south and merge into one south of the town. The western plain extends about 8 miles north of the town and is 3 miles wide, ending in a long grassy, uncultivated slope at the foot of the snow-covered Hsüeh Shan, 18,000 feet high. The eastern plain is 1½ miles wide and extends 4 miles north of the town. After their junction the two plains extend towards Ho-ch'ing for a distance of 6 miles below the town. The total population of the two plains is about 40,000, of whom the bulk are Li-chias though there are some Chinese in the town.

The town is unwalled and is completely commanded from the spur above it at a range of about 250 yards. It contains about 1,000 houses, many of them built on the hillside and some in the plain. There is no regular main street, but there is a small open market place in the centre of the town. A large stream is led through the town in several branches.

*Supplies and transport.*—Not much rice is grown, owing to the height of the plain. Excellent wheat is grown in large quantities, and maize, flour, beans and sheep are plentiful and cheap. Ghi is brought down from Wei-hsi and Tibet and is procurable in considerable quantities. Rice, paddy and straw are scarce.

Probably 300 mules could be obtained in the town and nearly 2,000 in the neighbourhood. This is a great mule-breeding centre and good baggage-mules are to be had for about Rs.70.

*Camping grounds.*—There is a good camping-ground east of the town. The rising ground at the northern ends of the plains would accommodate a large force, but as the water would come from streams below the camp, sanitation would have to be looked to. There is fair grazing in the dry season and plenty of timber. The climate is excellent.

*Government.*—The *Fu-kuan* who governs a large district is under *Ta-li*.

*Communications.*—To the north a difficult track leads to *Yung-ning*. To the north-west roads branch off at *Shih-ku*, two marches distant, to *Wei-hsi* and *A-tun-tzü*. To the south there is a road to *Ho-ch'ing* whence two roads lead to *Ta-li*, and to the south-south-west there is a road to *Chien-ch'uan Chou*. *Li-chiang Fu* is connected by telegraph with *Ta-li Fu*. [Watts-Jones, 1898].

**LIN-AN-FU.**—LAT.  $23^{\circ} 37'$ ; LONG.  $102^{\circ} 55'$ ; HEIGHT 4,900 feet.

The plain in which the town lies is irregular in shape measuring about 12 miles by 4 to 7 miles from east to west. The main river runs in a north-east direction through the southern part of the plain and is joined by another stream running down from the north-west. There are irrigated fields skirting these two streams for an average breadth of a mile, the rest of the plain is dry and little cultivated. A long spur, 200 feet high, divides the part of the plain in which the town lies from that through which the road runs from *Yün-nan Fu* to *Mêng-tzü*.

The main stream is from 10 to 14 yards wide and is bridged in two or three places, but is said to be always fordable.

The town is situated in the south-west corner of the plain on slightly rising ground. It has considerable suburbs on the east side and is said to contain altogether about 1,000 houses.

*Supplies and transport.*—There are fair supplies of the ordinary kind and a good many mules in the district. Carts are used in the plain for farming.

*Government.*—The *Fu-kuan* is subordinate to the *Tao-t'ai* at *Mêng-tzü*.

*Communications.*—The town lies about 5 miles off the direct road from *Yün-nan Fu* to *Mêng-tzü*. There is a road to the south-west through *Yüan-chiang* to *P'u-êrh* and *Ssü-mao*. [Davies, 1898].

LING-ERH HSIEN.—*See* P'u-erh Fu.

LU-CHIANG-PA.—*See* Möng-hko.

LU-LIANG CHOU.—LAT.  $25^{\circ} 5'$ ; LONG.  $103^{\circ} 35'$ ; HEIGHT 6,200 feet.

The plain in which the town lies is intersected by the Ch'ü-ching river. It stretches continuously for 50 miles up the river beyond Chan-yi-Chou, and the part below Lu-liang is about 12 miles in length by 5 or 6 miles broad at its widest but narrows down considerably at the ends. It contains a good many villages and is well cultivated, but the crops produced are poor, owing to difficulties of irrigation.

The town lies on the right bank of the Ch'ü-ching river. It is built in an oblong shape, but is slightly irregular in the south-west corner. It measures about 1,200 yards by 900. The wall is made of brick and stone, 20 feet high and 2 feet thick backed by an interior parapet of earth 15 feet high and 30 feet thick. There is a gateway in each face, and main streets connect all four. These streets are somewhat thinly lined with shops, but the rest of the interior space is not largely built over and a good deal of the eastern part of the town is under cultivation. Inside the walls there are altogether about 350 houses, and 50 more in a suburb outside the south gate. The town itself and the surrounding plain are full of trees, so that the city is not easily distinguishable at a distance.

*Point of attack.*—The town is not commanded by any high ground within range. About  $\frac{1}{2}$  mile to the west of the north-west corner is a low spur, of the same height as the town; between this and the walls there is a good deal of cover in the shape of houses and trees.

*Supplies and transport.*—The district is very poor. The ordinary supplies are obtainable, and fish from the river. No large numbers of mules could be got. Roughly made carts 6 feet long and 3 feet wide, drawn by two buffaloes or bullocks, are used all over the plateau. These do not go to Yi-liang, or Ch'ü-ching, though a cart road to the latter could easily be made.

*Government.*—The *Chou-kuan* is subordinate to the *Fu-kuan* of Ch'ü-Ching.

*Communications.*—There are roads to Yi-liang, Lu-nan Chou, Malung Chou and Ch'ü-ching Fu and boat communication with the last named, but no saving of time would be effected by the river route [Davies, 1898].

LUNG-CH'UAN.—See Möng-wan.

LUNG-LING T'ING.—LAT.  $24^{\circ} 38'$ ; LONG.  $98^{\circ} 43'$ ; HEIGHT 5,050 feet.

Called Möng-long by the Shans.

A Chinese town between the Shwe-li and the Salween situated in a plateau  $2\frac{1}{2}$  miles long and 2 miles broad, surrounded on all sides by bare hills, which are lowest to the south-west. The plateau is highly cultivated, and contains about 10 villages, in addition to the town and suburbs. The wheat fields are extensive to the north-west of the town on the banks of one of the tributaries of the Hua-ch'iao Ho which amply waters the plateau.

The town is triangular in shape with blunt apex to the south; it lies on the eastern side of the plain and contains together with the suburbs to the north and north-west nearly 2,000 houses including the *Yamen* of the *T'san-chiang* (Lieutenant-Colonel) Commanding the troops, the Sub-Prefect's *Yamen* near the bazaar, several large inns, and substantial temples.

One paved street about 1,400 yards long runs through the town from the south-west to the north-east, descending slightly towards the latter and bordered by houses and shops. An extensive bazaar lies at the lower or north-east end.

The town is partially walled and has a fortified gateway at the north-east exit towards Ta-la-mêng and Yung-ch'ang Fu.

*Point of attack.*—The town would be best attacked from the south from the Hsiang-ta route, which crosses the hills within shell range, the crests of the hills being bare or lightly clothed with low jungle, afford good positions for mountain batteries; descent into the plateau, moreover, would be easy. A detached force might also co-operate from the south-west from the point

where the route from Mêng-shih crosses the Mêng-shih-Lung-ling boundary, by occupying the low knolls overlooking the town.

*Camping accommodation.*—There is an excellent camp large enough for a battalion to the south-south-west of and just above the town on an open level grassy space, water being obtained from a stream (one of the tributaries of the Hua-ch'iao Ho), which is crossed just before reaching the camp by a solid stone bridge. The sides of the last half mile of the route from Mêng shih would furnish additional camp accommodation for two battalions. The summits of the low knolls running up the centre of the southern portion of the plateau would camp a battalion, water being brought up from the stream, 150 feet below.

Within the town itself, the *Yamens*, inns and temples would accommodate a couple of battalions without greatly interfering with the bulk of the inhabitants.

*Trade.*—The trade of Lung-ling would appear to be extensive, a great deal of it being carried on with the wealthy Chinese-Shan town of Mêng-shih, two short marches distant. A certain number of traders go down to Burma annually, some it is said as far as Rangoon. The bazaar contains several fine shops, in which a certain amount of Manchester goods, piece and hardware may be found in addition to the usual Chinese produce.

*Supplies* are extensive, consisting of paddy, wheaten flour, gur, vegetables, fruit, native liquor, etc., while the hills to the north-west graze a considerable number of cattle. Firewood is somewhat scarce.

*Transport.*—There is a certain number of mules procurable for hire or purchase and a certain amount of pony and mule breeding is carried on.

*Communications.*—There are roads to T'êng-yüeh, Yung-ch'ang Fu and Bhamo. [Walker, 1899].

MA-LI-P'O.—LAT.  $23^{\circ} 10'$ ; LONG  $104^{\circ} 45'$ ; HEIGHT 4,060 feet.

The last Chinese town on the route from K'ai-hua to Ha-giang in Tong-king.

It consists of about 400 houses, built on either side of a paved street about 20 yards broad, sloping up a small valley, with a ditch down the centre. Double gateways give access to the town at both ends of the street and the backs of the houses form a wall on either side.

It lies in a most indefensible position, commanded from all sides, but the ridge above the town to the south commands the road to Ha-giang. The neighbourhood has a bad reputation for dacoits. Supplies are very scarce.

*Communications.*—From K'ai-hua to Ma-li-p'o the road is good, well paved in places and with the streams spanned by stone bridges. Beyond the town the path is rough and the streams unbridged. Roads also lead west to Ma-pei-wan and east to the frontier at Mao-chang-ka. [Rigby, 1900].

MA-LUNG CHOU.—LAT.  $25^{\circ} 25'$ . LONG  $103^{\circ} 35'$ . HEIGHT 7,000 feet.

The plain in which the town lies is sterile and composed of poor soil. It is 5 miles long by 2 miles wide, formed of several converging valleys. The country round forms a high undulating plateau probably one of the largest in the Province.

The town contains about 250 houses and is of little importance. It is surrounded by a wall of brick with stone foundations 12 feet high in bad repair.

There are a good many ponies in the district and a certain number of mules and sheep.

The town is commanded on all sides from ranges of 600 yards to 1,500 yards, but commands the near ground fairly well. The best point of attack would be from the low hills to the south, as the town is mostly built on the south-east slopes and would be quite exposed to fire from this direction.

The *Chou-kuan* is subordinate to the *Fu-kuan* of Ch'ü-ching [Watts-Jones, 1898].

MAING-LA.—See Kan-nai.

MAING-MAW.—See Möng-mow.

MANG-SHIH.—See Möng-hkwan.

MAN-HAO.—LAT.  $23^{\circ} 1'$ ; LONG.  $103^{\circ} 18'$ ; HEIGHT 650 feet.

C148GSB

A Chinese town of about 300 houses on the left bank of the Red river and the port of Mêng-tzu, which is  $32\frac{1}{2}$  miles distant. It is mostly inhabited by Kuang-hsi men, as the low elevation makes it unsuitable for Yün-nanese. There is a small *yamen*, and a telegraph and customs office.

Beyond a bamboo palisade the place is undefended.

*Trade*.—The bulk of the Tong-king trade to Yün-nan passes through the town, and the tin from the Ko-chiu mines, near Mêng-tzu, is shipped from here.

*Supplies* are fairly good and goats obtainable.

*Camp accommodation* on fairly level ground above the town for about 1,000 men.

*Communications*.—Man-hao is on the main trade route to Mêng-tzu, but it is intended to make a road to the latter place from Hsin-kai further down the river, which will probably take away a good deal of traffic from Man-hao. The town is important as being the limit of navigation of the Red river for large junks, though small boats can ascend above Yüan-chiang. The junks which come to Man-hao are about 50 feet long and 12 feet wide. Lao-kai can be reached by boat in a day or a day and a half. From Man-hao there is telegraphic communication with Yün-nan Fu and Lao-kai.

For Man-hao ferry see "Red river". [Davies, 1898, Rigby, 1900].

MAN-HPA.—See Möng-kaw.

MAN-WAING.—LAT.  $24^{\circ} 33'$ ; LONG.  $97^{\circ} 49'$ ; HEIGHT 2,800 feet.

A town on the Ta-ping below San-ta. Its proper Shan name is Man-Ying. This has been corrupted by the Burmese into Man-waing or Manwyne and by the Chinese into Man-yün.

*Description of town*.—The town is situated in the Möng-na-San-ta plain on the right bank of the Ta-ping river at the foot of the lower slopes of the hills which bound the valley to the north. There are 2 miles of practically level ground to the north of the town before the foot of the steep part of the hills is reached. The actual town of Man-waing is inhabited by

Chinese and contains about 100 houses. It is, however, surrounded by four Chinese-Shan villages forming suburbs to the main town, and the whole circle of five villages is often spoken of as Man-waing, more especially because these five villages together with some of the Kachin and Palaung villages on the hills to the north form an isolated bit of territory subject to Möng-hti, all the country round this group belonging to San-ta.

The main Chinese town is about 350 yards long and 100 yards wide, and has one narrow stony street down the middle running roughly east and west. The houses, 100 in number, are built chiefly of soft brick, and are packed closely together in the usual Chinese fashion. The inhabitants are mainly traders and not more than half-a-dozen of them are permanent residents as they cannot stand the climate of such low-lying places. South of the town, between it and the river, are vegetable gardens. To the south-west is the large Shan village of Hpai-tong la, containing 60 or 70 houses, and due west of the town about 200 yards from it, is the fort with the village of Man-loi or Man-möng beyond it. Joining the town on the north is the village of Man-ha, and immediately east of Man-ha across a small stream is a large caravanserai which with three or four other houses to the east of it, is surrounded by a wall of soft bricks. To the south of the caravanserai is the bazaar, and between the bazaar and the river are a few Shan houses. To the east, and across a small stream, is the village of Hpa-kö.

*Surroundings, defences, and points of attack.*—The greater part of the town and its suburbs are situated on a level with the paddy-plain not much above the river, while on the north-west of the town the ground rises by a steep bank some 30 feet high, out of the paddy-plain on to the low, grassy slopes which come gradually down from the foot of the hills. The fort, however, and the village of Man-loi, also called Man-möng, are situated on this more elevated ground. All the country below this bank is paddy-land except between the main Chinese town and the river where there are vegetable gardens enclosed by fences. All the ground above the bank is bare with short grass on it and very few trees, and much cut up by steep nullahs which in January are dry or nearly dry. The ground on the left bank of the Ta-ping is a paddy-plain.

The Chinese town originally had a mud brick wall all round it about 8 feet high and 1½ feet thick, but most of it is now

broken down, though near the two gateways, which lead into the town from the east and west respectively it is in fairly good repair.

The Shan villages of Hpai-tong-la, Man-loi, Man-ha, and Hpa-kö have stiff bamboo fences round them standing on banks 2 or 3 feet high.

The fort is a square of about 120 yards each side. It is surrounded by a soft brick wall about 12 feet high and 2 feet thick, loopholed, and with a coping of tiles on top. The main gate, which is made of wood, 3 or 4 inches thick, is in the south-east side. This is defended from frontal fire by a short traverse in front of and 5 yards from it, and there is a little house above the gate. There are small towers at each corner and in the middle of the north-east and south-west sides, jutting out so as to give flank defence to the sides. Inside the fort there is a road down the middle from the south-east gate: on each side of this road are the men's quarters, and at the further end along the north-west side are the offices and officer's quarters. The whole of these houses are built of soft bricks and roofed with tiles. The fort commands the ground on the left bank of the Ta-ping and the part of the ground nearest the water on the right bank: but the bank which runs along just south of the fort, dividing the elevated ground from the level of the paddy-land, is so steep that the ground immediately below it could not be fired on from the fort. To the west and north the ground is under fire from the fort for 800 or 900 yards, but the fort can be approached under cover behind the village of Man-loi (Man-mong) or down nullahs. To the north-east and east there is some dead ground but parts of the Chinese town and the village of Man-ha could be fired into from the fort, and the paddy-ground north of the caravanserai is under its fire. The caravanserai itself is hidden from the fort by Man-ha.

The fort is probably only meant to resist an attack from Kachins, and for this purpose it is quite strong enough, as they would be unable to knock down or get over the wall which surrounds it. This would be the main difficulty in taking it, and it would be necessary to breach it with guns, or else to have ladders, or some means of bursting in the gate. At a point 900 yards north-north-west of the fort a good spot could be found for artillery or infantry to bring fire on the fort, while an advance might be

made down a nullah which is about 30 feet deep and 10 yards wide at the bottom, and would therefore not mask the fire directed on the fort. This nullah is entirely covered from fire from the fort the whole way down. At the north corner of the fort, however, the sides of the nullah are so steep that it would be impossible to climb up, and it would be necessary to go further on and then turn up to the fort. A simultaneous advance might also be made by another party from the paddy valley to the village of Man-loi where they would be within 150 yards of the fort covered by the low bank and high bamboo fence which surrounds the village.

Besides the fort the enclosure in which the caravanserai is situated might be defended. It is of irregular shape and is surrounded by a soft brick wall about 12 feet high and 2 feet thick. The wall is a comparatively new one, but is not complete. On the south-west between the caravanserai and the Shan houses south-east of the bazaar there is no wall at all, and in several places there are openings 5 or 6 yards wide. The wall at present is not loop-holed. Besides the caravanserai there are two or three brick houses inside the enclosure, but the greater part of the space inside is not built over and is used by mule drivers to camp in. The caravanserai itself is about 130 yards long and 70 yards wide with a loopholed wall round it, the wall being of the same size as that which goes round the whole enclosure and on its north-west and south-west sides is a continuation of this enclosure wall: it is divided down the middle by another wall with a door through it into two courts about the same size. The sheds which shelter the mule drivers, and sometimes the mules, are built inside the walls all round the northern court and round part of the southern court. The principal house is along the north-west side of the northern square. The main entrance is through a wooden gate about 3 inches thick in the south-east face of the caravanserai: there are also small gates leading out of the north-east and south-west sides, in the northern court just north of the wall which divides it from the southern court. The elevated ground above the bank from 200 or 300 yards north-west of the enclosure commands the wall, while the nullahs form covered ways by which the wall might be approached. An attack on the enclosure from the east could come up under cover behind the village of Hpa-kö.

An attack on Man-waing from the left bank of the Ta-ping would be more difficult, as even if boats could be procured, the

crossing would be commanded from the fort, and from many points in the Chinese town, the Shan houses south of the bazar and Hpa-kö. If boats were not procurable, the river might be forded, but it would probably be over waist-deep in the driest season. It would be better to cross higher up or lower down, and not exactly opposite the town.

*Camping-grounds.*—There are large camping-grounds on grass and paddy all round Man-waing.

*Supplies.*—There is a bazar every day at Man-waing, but not much to be bought in it. A few vegetables can be got, and beef, rice, and paddy are obtainable from Man-waing, and the surrounding districts of San-ta and Möng-na. Pigs and chickens are plentiful, and sugar-candy can be got.

*Transport.*—During the dry weather large numbers of mules pass through Man-waing daily, chiefly loaded with cotton from Burma. These are, however, all constantly used for trading, and in time of peace it would not be safe to count on being able to hire mules without making previous arrangements.

The Chinese-Shans who inhabit Man-waing and the surrounding country make fairly good coolies. Large numbers of men from this valley come into Burma every cold weather to work as coolies, and in case of war, in the event of other transport failing, plenty of Chinese-Shan coolies could be obtained.

There are no pack-bullocks in Man-waing or in the neighbouring States of Möng-na and San-ta.

Boats could be got from most of the riverside villages in Möng-na and San-ta.

*Government.*—Man-waing, though surrounded by San-ta territory, is under the *Sawbwa* of Möng-hti, near Nan-tien on the road to T'êng-yüeh. Man-waing territory includes the Chinese town and the four Shan villages of Hpai-tong-la, Hpa-kö, Man-loi or Man-möng and Man-ha, besides some Kachin and Palaung villages on the hills to the north.

*Communications.*—Man-waing is on the old trade route from Bhamo to T'êng-yüeh *via* Nampoung, about 52 miles from the former and 60 miles from the latter. There are several roads leading up to the Kachin villages to the north, and roads to the south leading to Ho-hsa and to La-hsa, and

from Ho-hsa a road goes off through Möng-hüm to Chê-fang and Möng-hkwan and another road on to Möng-wan, and thence to Möng-mow and Nam-hkam. From Man-waing to Möng-na the Ta-ping is navigable for large boats and rafts, and some of the trader's cotton is taken up in this way. Connected by telegraph with T'êng-yüeh with Bhamo direct and also with Bhamo through the Tunhong Military Police Post. [Davies, 1894].

MAN-YÜN.—See Man-waing.

MAO-MI EH.—See Waw-myet.

MÊNG-HUA T'ING.—LAT.  $25^{\circ} 16'$ ; LONG.  $100^{\circ} 12'$ ; HEIGHT 6,000 feet.

The town lies three marches south of Ta-li Fu, at the southern end of a plain some 20 miles long and 3 miles wide, with a stream about 15 yards wide, and 1 or 2 feet deep running down the western edge of the plain from north to south. The plain contains numerous villages, but a good deal of it is still uncultivated. It is inhabited by Chinese and Panthays, the hills around being occupied by Lolos.

*Supplies and transport.*—Supplies of the ordinary kind could be got in considerable quantities, and though the district is not a great trading centre, there are probably 500 to 1,000 mules procurable in the neighbourhood.

*Communications.*—A road leads north through Hsia-kuan to Ta-li Fu and southwards to P'u-êrh Fu via Ching-tung T'ing. There is a road south-south-west to Shun-ning Fu. [Davies, 1895].

MÊNG-SHIH.—See Möng-hkawn.

MÊNG-SUNG.—See Möng-hsung.

MÊNG-TZÜ HSIEN.—Latitude  $23^{\circ} 25'$ ; longitude  $103^{\circ} 21'$ ; Height 4,725 feet.

The town stands in a plain, measuring 10 miles from north to south by 3 to 5 miles wide. It is not very productive as there are scarcely any irrigated fields, and the crops depend on the rain.

About 3 miles south of the town is the large walled village of Hsin-an-so.

The town is built in the middle of the plain and is oval in shape, the longer side measuring about 900 yards. It is sur-

rounded by a brick-wall 18 feet high, backed up by an interior parapet of earth forming a banquette. To the south a large lake extends to close under the town-wall. The town contains 1,000 to 1,200 houses including a large suburb on the west. The French settlement including the Consulate, Customs and Railway Offices is situated outside the city to the south-west.

*Point of attack.*—The town is not commanded by high ground except to the west and east at a distance of about  $2\frac{1}{2}$  miles. An advance might be made against the north face, where the wall is lowest. Cover would be obtained from the houses outside the wall on this side.

*Trade.*—Mêng-tzü is a treaty port and consequently one of the largest trading places in Yün-nan. The Ko-chiu tin mines, 1 day to the west, supply the bulk of the exports, and the imports are chiefly Indian yarn.

*Supplies and transport.*—Fair supplies of the usual kind are obtainable, and kerosine oil is to be got. Mules can be procured in large numbers.

*Government.*—The town is the residence of a *Tao-t'ai* or Commissioner of Customs, who also acts as Intendant of the south-east of the Province: also of several of the officials of the French railway.

The town and district is under a *Hsien-kuan*, who is subordinate to the *Fu-kuan* of Lin-an.

*Communications.*—Roads go north to Yün-nan Fu, east to K'ai-hua Fu and south to Man-hao, with all of which places there is telegraphic communication.

There is a road west to P'u-êrh Fu and a new road is in course of construction to Hsin-kai on the Red River. [Davies, 1898; Rigby, 1900].

**MI-LÊ HSIEN.**—LAT.  $24^{\circ} 25' N.$ ; LONG.  $103^{\circ} 26' E$ ; HEIGHT 5,060 feet.

*The town.*—The town is situated at the extremity of a narrow saddle running down from north-west to south-east to the junction of the Nan-ch'iao Ho with a small tributary, the Hua-ko Ho. The town is  $\frac{1}{2}$  mile from the right bank of the former stream and 120 feet above it. The plain, which is 5 miles wide at this point, is composed of poor sandy soil, only

under cultivation close to the river-bed. The town is in the form of an irregular oval 610 yards by 480. The perimeter is 1,675 yards. The town is surrounded by a crenelated wall of stone blocks, in good repair, with a coping of brick. It has a thickness of  $1\frac{1}{2}$  feet and varies in height from 18 to 25 feet. It is loopholed to allow of men firing kneeling. On the inside the wall is backed by an earthen parapet 13 to 20 feet high with a banquette  $3\frac{1}{2}$  yards wide paved with brick in places. The wall is pierced with a gateway in each corner, surmounted by two-storied guard-houses of brick, in fair repair. Entrance to the town is given through bricked-in tunnels pierced through the parapet, 13 yards long, and  $4\frac{1}{2}$  yards wide. The doors are double, of wood 6" thick and thinly plated with iron on the outside. There is no ditch, except a short length in the south-west corner, which is 5 yards wide, 1 foot deep and forms a sewer. The gateways are connected by paved roads; the one running from east to west, as well as the one running from the south to the central intersection, is lined with small shops. The northern half of the town is thinly built over and is largely under cultivation. A large business quarter lies outside the east and south-east faces. It is composed of paved streets, lined with the usual shops and contains several mule-inns, Adjoining the west gateway is a small suburb composed of poor houses.

*Point of attack.*—The town is commanded at short range by the hills on the north on the left bank of the Hua-ko Ho. The easiest line of advance would be along the saddle on which the town is built.

*Government.*—The *Hsien-kuan* is under the *Chou-kuan* of Kuang-hsi.

*Supplies.*—A brisk trade seems to be carried on, and supplies of the usual kind are procurable in good quantities. Possibly 300 mules and ponies could be obtained in the neighbourhood.

The Nan-ch'iao Ho is 30 yards wide,  $2\frac{1}{4}$  feet deep with gentle current and sandy bed. It is crossed on the A-mi Chou road by a stone bridge of two spans with 17 feet roadway.

The Hua-ko Ho is 13 yards wide, 1 foot deep, with gentle current and pebbly bed. It is crossed on the Yün-nan Fu road by a two-arched stone bridge with 20 feet roadway.

*Communications.*—The town lies on the main road from Yün-nan Fu to A-mi Chou. There is a branch road going east-north-east to Kuang-hsi Chou. [Fraser, 1900.]

MIEN-NING TING.—LAT.  $23^{\circ} 52'$ ; LONG.  $100^{\circ} 1'$ ; HEIGHT 4,850 feet.

Called Möng-myen by the Shans.

A Chinese town, the chief town of a small district under Shun-ning. The town is situated in a plain about 7 miles long and 2 miles wide with the Möng-lai Ho or Mien-ning Ho, a stream which is the principal source of the Nam-ting, running down it from south to north. A good deal of the plain is taken up with the ends of low bare spurs which run out into it from the surrounding hills, and only a comparatively small area is cultivated by irrigation. There are 12 or 15 villages in the plain, but most of them very small. The inhabitants are Chinese and Shan, and the proportions are said to be about seven Chinese to three Shans. The Shans have taken very much to Chinese dress and customs, though there are still five or six Shan *póngyi kyaungs* in the valley.

*The town.*—The town stands on the end of a low spur which runs out from the hills to the west, near the south end of the plain. There are about 200 houses inside the walls and 300 in the suburbs. It is of irregular shape about a mile in circumference, surrounded by a brick wall 20 feet high and 2 feet thick, backed up on the inside by an earth parapet 15 feet high and from 4 to 12 feet thick. It has four gates leading out to the north, east, south, and west respectively. The main street is that running through the town from east to west. Outside this houses are dotted about anyhow, and a good deal of the space inside the walls is not built over. The town is surrounded by suburbs on all sides, the principal one being that on the east side, where many of the merchants live and where the only inns are.

*Point of attack.*—The town is built on ground which commands all the ground round it except where the hills begin to rise  $\frac{1}{2}$  mile off to the west. The Shan *kyaung*, however, in the eastern suburb, about 500 yards from the town walls, is on a little knoll about the same height as the town if it does not actually command it. The *kyaung* is surrounded by a mud

wall, and this would make a good point to attack the town from. Here, and in fact all round the town, the houses of the suburbs would give cover right up to the walls.

*Trade, transport, and supplies.*—There are several small merchants, but very few who own more than 10 or 12 mules. The trade is with Möng-hsa, Möng-cheng, and other Shan States. A certain number of transport mules could be got, perhaps 100. Supplies in fairly large quantities of the ordinary kind are obtainable, such as paddy, rice, beef, pork, vegetables, chickens, and ducks. Ducks are more numerous than in most places. Flour is to be got in small quantities.

*The Mien-ning Ho or Möng-lai Ho at Mien-ning.*—The Möng-lai Ho where it runs down the Mien-ning plain is about 30 yards wide and 2½ to 4 feet deep, running with a rapid current over a sandy bed. On the Yün-Chou road it is crossed close to the town by a wooden two span bridge 30 yards long and 5 feet wide, supported on brick piers. There are also said to be two or three other bridges in the plain. The river is fordable in most places in the cold weather.

*Government.*—Mien-ning is in charge of a *T'ing-kuan* with the rank of *San-fu*, who is under the *Fu-kuan* of Shun-ning.

To the north Mien-ning is divided from Yün-Chou by a small stream about latitude 24° 15'. To the south-west it joins Kêng-ma territory, the boundary lying between the villages of Wan-nien Chuang and Sepyek just below latitude 24°.

*Communications.*—From Mien-ning there is a road to the north to Yün-Chou five marches off, whence a road branches off to Ching-tung, while the main road goes on to Shun-ning Fu and thence branches off to Yung-ch'ang and to Ta-li Fu. To the south-west there is a road to Mêng-sa and thence to Kêng-ma or to Kun-long. To the south-east there is a road through Wei-yüan to P'u-erh Fu and Ssü-mao T'ing. [Davies, 1895.]

MOMIEN.—*See* T'êng-yüeh T'ing.

MONG-CHEH.—*See* Hsip-sawng-Panna.

MÖNG-CHENG.—*See* Chêng-k'ang.

MÖNG CHU (MÊNG-CHU).—LAT. 23° 4'; LONG. 100° 39'; HEIGHT 4,850 feet.

A Chinese town in the Shan State of Mêng-pan, called Möng-su by the Shans.

The town lies at the foot of the hills on the east of a plain 2 miles long and  $\frac{1}{2}$  mile wide ; it is unwalled and contains about 100 houses. There are also 4 or 5 villages in the plain.

*Trade, supplies and transport.*—There is little trade most of it being carried on by a small neighbouring Panthay village which owns about 100 mules. Supplies are scanty, but there is fair grazing in March. In the dry weather the water from the stream is largely used for irrigation and the remainder is nearly stagnant and not good for drinking purposes.

There is good camp accommodation  $\frac{1}{2}$  mile from the town on the P'u-érh Fu road.

*Communications.*—The town is on the main road from Kun-long Ferry to Ssü-mao T'ing. The road to Kêng-ma crosses the Mekong at Ta-huan Ferry, that to Ch'üan-lo at Nan-pei Ferry. [Davies, 1895.]

MÖNG-CHUNG.—See Yüan-chiang Chou.

MÖNG-HKO.—LAT.  $24^{\circ} 55'$ ; LONG.  $98^{\circ} 50'$ ; HEIGHT 2,300 feet.

A Shan State called Lu-chiang-pa by the Chinese, lying along the Salween river where the T'êng-yüeh road to Yung-ch'ang Fu crosses the stream at the iron bridge.

*General description.*—The broad part of the plain is about 10 miles long and from 2 to 3 miles wide ; it extends for about 3 miles above the iron chain bridge and 7 miles below it. The whole of the State lies on the right bank, except from the bridge downwards for about 2 miles, where there is some flat ground and one or two villages on the left bank as well. The plain is well cultivated and is bounded on each side by hills rising to 7,000 or 8,000 feet. It is shut in at both ends by the hills closing in on the river, but it possibly opens out again below the main plain as there are said to be Shan villages, a day's march south of the bridge.

*Inhabitants.*—The permanent inhabitants of the plain are Chinese Shans, but in the cold season many Chinese from the surrounding hills come down and build temporary houses in the valley.

*Climate.*—The height of the valley is from 2,000 to 2,500 feet, a very much lower altitude than any of the surrounding country. It is consequently not cold in the cold season and is said to be very hot in the hot weather. The Chinese state that they cannot live in it from April to November; but they say the same of Chê-fang, Nam-hkam, and other Shan States, so that it must not necessarily be called unhealthy because the Chinese consider it so.

*Government.*—The State is under a Shan *Sawbwa*, who pays tribute to the Chinese official at Lung-ling. The Chinese on the neighbouring hills are not under the *Sawbwa*.

*Trade.*—Sugar-cane, plantains, etc., are cultivated and exported to T'êng-yüeh and Yung-ch'ang Fu.

*Supplies and transport.*—Supplies of rice, straw, paddy and beef could be got, and pigs, chickens, and ducks are plentiful. A little grass can be got in January, and the valley is better off in this respect than the surrounding country. Some mules and pack-bullocks are kept, and perhaps 100 animals could be got in the State.

*The capital.*—The capital is situated about 5 miles below the bridge on the right bank of the river and about 2 miles from it at the foot of the hills, just to the south of two little hills which stand out in the plain and hide the town from the bridge. As seen from the hills above it seems to be a good-sized village. It is said to contain about 300 houses and to be surrounded by a soft brick wall 6 or 8 feet high.

*Communications.*—The State lies on the main road from T'êng-yüeh to Yung-ch'ang and there is also a good road to the south through Chê-an-so to Lung-ling. There is said to be a level road to the north to the Shan State of Nawng-yan (called Shang-chiang by the Chinese). [Davies, 1895.]

MÖNG-HKWAN.—LAT.  $24^{\circ} 27'$ ; LONG.  $98^{\circ} 32'$ ; HEIGHT 3,350 feet.

Called Mang-shih by the Chinese. A Chinese Shan State lying south of Lung-ling between the Salween and the Shwe-li.

*General description.*—The Möng-hkwan plain is oval in shape, about 12 miles long and 8 miles wide. The Nam-hkwan runs through it in a south-westerly direction and the Nam-kaw-lang enters the plain near the bottom, flows along its south-

eastern end, and meets the Nam-hkwan in the extreme south-westerly corner of the plain. From here the Nam-hkwan runs through a narrow defile till it emerges below in the Chê-fang plain. This plain is bounded on the north, east, and south by high bare hills, but on the west a much lower spur separates it from Möng-chi. The plain is well cultivated, chiefly with rice, and is considered one of the richest districts of Western Yünnan. Nearly every village is surrounded by clumps of bamboo and fruit trees, and plantations of sugarcane and vegetable gardens are numerous.

*Inhabitants.*—The inhabitants of the plain are all Shans, with the exception of 10 or 12 Chinese families, who live in the bazaar close to the town. In the cold weather, however, a great many Chinese come down from Lung-ling and the neighbouring hills to trade. They all return in March. The surrounding hills are inhabited chiefly by Chinese, with a few Palaungs. There were formerly a few Kachins in the south of the State near the Chê-fang border, but they have now been driven out, and no Kachin is allowed to live in the State.

*Government.*—The State is under a Shan *Sawbwa*.

The villages in the plain are divided into circles each under a *kang* whose headquarters are at Fa-po, Lawm-hkai, Man-hum, Kawng-mut, Na-mu, Fawng-pye, and Hpa-te.

The district of Möng-chi is also under Möng-hkwan.

The boundaries of the State are roughly speaking the tops of the ranges of hills by which the State is surrounded. To the north it touches territory directly under Lung-ling; to the north-east it joins Hsiang-ta, also a district of Lung-ling; to the south-east it is said to border on Möng-ko; and to the south and south-west it joins Chê-fang. To the west the boundary lies along the range of hills which forms the watershed between Nam-chi and the Shwe-li; this separates it from Möng-yang, a district of Möng-ti.

*The town.*—The town lies 2 or 3 miles from the foot of the hills near the north-east corner of the plain, about  $1\frac{1}{2}$  miles from the left bank of the Nam-hkwan. It is entirely surrounded by bamboo and other trees, so that it cannot be seen until close on it. Beyond this circle of trees, which is 300 or 400 yards in width, is an open paddy plain. The town itself contains 500 or 600 houses, most of them well built of soft bricks; it is

nearly square in shape, about 600 yards each way. It was formerly surrounded by a mud wall 10 feet high and 1 foot thick, but this is now nearly completely broken down. The new palace, which has only lately been built, occupies the whole of the centre of the town and stands in an enclosure 150 yards square surrounded by a brick wall 12 feet high and 2 feet thick. The town is entered by four gates, one about the middle of each side.

Outside the town is the Chinese bazaar which begins from near the south-west corner and runs in a southerly direction for 200 or 300 yards. In the cold season this is well filled with Chinese, but from April to November most of the houses are empty.

*The Nam-hkwan and Nam-kaw-lang in Möng-hkwan.*—The Nam-hkwan rises in the hills to the north-east. Where it is crossed near Man-hung on the road from Möng-hkwan to Möng-chi, it is 30 yards wide and 1 foot deep in May, running over a sandy bed with a moderate current. At this point there is a shaky footbridge. The ford is occasionally impassable after very heavy rain, and in the rains a small raft is said to be kept here.

There are also fords (and raft ferries during the rains) at Se-yan, Hang-ving, and Hpa-te, and a stone bridge across the river at the junction of the Nam-pa-lawt in the hills, where one of the roads to Lung-ling crosses it.

The Nam-hkwan is not navigated in this part of its course, and there are no boats in Möng-hkwan.

Boats could not descend to Che-fang owing to rapids in the defile between these two States.

The *Nam-kaw-lang* is 20 or 30 yards wide and fordable everywhere in the dry season. It is crossed by a raft ferry during the rains at Hang-ving and by stone bridges at Man-li, Man-nawng, and at Na-mu. The latter bridge has seven arches. The river is not navigable.

*Trade.*—Möng-hkwan is a considerable trading centre. The Shans in the plain use bullocks and the Chinese on the surrounding hills trade with mules. Moreover, a great many merchants from Lung-ling make Möng-hkwan their head-quarters during the dry season. Rice, sugarcane and tobacco are the chief exports, and cotton clothes, shoes, salt-fish, etc., are imported.

*Supplies.*—Large supplies could be got of beef, pork, geese, chickens, ducks, paddy, rice, sugarcane, and tobacco. Bazaars are held every five days at the capital, at Hpa-te, and at Man-yak in Möng-chi. Möng-hkwan is considered the richest of all the Chinese Shan States.

*Transport.*—Possibly 1,000 bullocks could be got in the plain. One of the principal bullock-owning villages is Na-mu near the south end of the plain. The number of mules in the State is said to be 1,000 or 2,000. Some could be got from Chinese traders in the capital during the cold season, but the majority are in Mêng-ka, Möng-wun, and other Chinese villages in the hills.

*Communications.*—Möng-hkwan is on the main trade route leading from Yung-ch'ang and Lung-ling to Nam-hkam and Theinni. The road to Yung-ch'ang does not go up to the iron bridge, but crosses the Salween by ferry at La-mêng, the road to Möng-hko and the iron bridge branching off from Chê-an-so. The road to Möng-chêng (Chêng-k'ang) and Kêng-ma lies through Hsiang-ta and P'in-ka, crossing the Salween at Han-kuai or at Ch'i-tao Ho. The main roads to Bhamo lie; (1) through Möng-yang, Möng-hum, and Möng-na; (2) through Chê-fang and Möng-mow. A shorter route could probably be found by crossing the hills from the bottom of the Chê-fang plain to Möng-wan, but this road is not used as a trade route. To T'êng-yüeh the shortest way lies through Lung-ling. The road to Nam-hkam lies through Chê-fang.

From Möng-hkwan there are three roads to Chê-fang—(1) crossing the Nam-kaw-lang at Na-mu and ascending to Mêng-ka, thence descending through Hsin-chai to Man-hkaw in the Chê-fang plain; (2) crossing the Nam-kaw-lang at Hang-ving and ascending to Pang-teng; thence down to Se-ho-möng; (3) crossing the Nam-kaw-lang at Hang-ving and keeping down the left bank of the Nam-hkwan close to the river without ascending the hills much till the Chê-fang [plain is reached at Se-ho-möng. [Davies, 1895.]

MÖNG-HPO—*See* P'u-êrh Fu.

MÖNG HSUNG.—LAT.  $23^{\circ} 20'$ ; LONG.  $99^{\circ} 28'$ ; HEIGHT 2,350 feet. Called Mêng-sung by the Chinese. (Not to be confused with Mong hsung near Mong-hkwan).

A small Shan State, included with Mêng-ko and Möng-tum under the Mêng-ko *Sawbwa*, and under the Chén-pien district.

The main part of the plain is about 4 miles long and 1 mile wide and lies along the Nam-wa, a stream 15 yards wide and 2 feet deep, a tributary of the Nam-hsung. The town lies at the foot of the hills on the western side of the plain. It consists of 40 or 50 houses, with a fine *wat*, surrounded by a stone wall about 8 feet high. The inhabitants are Chinese Shans for the most part.

There is not much trade in the district and very little in the way of supplies or transport to be got.

There is a camp for about 150 men in the paddy-fields south of the town.

*Communications.*—The road from Kun-long to Ssu-mao T'ing and P'u-êrh Fu passes through the plain, but not through the town. There is a road to the north to Kêng-ma, to the east to Mêng-mêng and to the west to Mêng-ko. [Davies, 1895; Turner 1900.]

MÖNG-HTI.—See Möng-ti.

MÖNG-HTONG.—See Ta-mêng-t'ung.

MÖNG-KA—(MÊNG-KA).

There are three places of this name.

I.—LAT,  $25^{\circ} 9'$  LONG  $98^{\circ} 3'$  HEIGHT 5,400.

A Chinese district under T'êng-yüeh. It consists of a valley some 2 miles long and from  $\frac{1}{2}$  to 1 mile wide with the Mêng-ka-hka, a stream (here 12 yards wide and 1 foot deep) running down the middle of it from north to south. On the east of the valley, about half-way down it, is the principal village which is called Yang-chai and contains about 30 houses, and  $\frac{1}{2}$  a mile lower down is Yang-nai-p'u, while on the opposite side of the valley is Lung-to. Besides these there one or two little villages of three or four houses and the whole valley contains about 100 houses. At the bottom of the valley the stream takes a sharp bend to the west, and passing through a short gorge, emerges into another little valley with the village

of Su-tien in it, about 4 miles by road from Yang-chai. This village is also under the Mêng-ka headman.

The hills which surround the valley rise about 2,000 feet above it. To the north they are very bare, but on the other sides are partially covered with jungle. The inhabitants of the Mêng-ka valley are mixed Chinese and Lisaw; those of Su-tien are exclusively Lisaw.

*Defences, etc.*—The villages are not fortified, but are in most places surrounded by a stone wall 3 feet thick, with a growing fence or very slight bamboo hedge on top. This would form no real obstacle and is scarcely considered as a fortification. The headman is the possessor of a Martini rifle, and as the Kachin villages in the surrounding hills are under him he could probably collect 100 or 200 men with guns, all muzzle-loaders and most of them probably Kachin matchlocks. Most of the Chinese and Lisaws in the valley are said to possess guns of some sort.

*Supplies and transport.*—The whole of the valley is cultivated with rice, and other crops are grown on the surrounding hill-sides, but the soil is so poor that the inhabitants can scarcely grow enough to support themselves. They rear pigs, chickens, ducks, and geese in small quantities, and there are a few mules, cows and buffaloes in the valley. A column marching through the district would be able to feed itself for a day or two, but beyond this no supplies or transport could be depended on. There are no real traders in the valley but occasionally one or two mule-loads are taken out to trade with neighbouring villages.

*Communications.*—Mêng-ka is on the main road which leads from Myitkyina and Sa-don through San-si to T'êng-yüeh. Approaching from Sa-don it first comes in sight about  $3\frac{1}{2}$  or 4 miles off from the top of a bare spur which overlooks it and commands a good view of the valley, though the actual village of Yang-chai is hidden by a small spur which runs out into the valley just to the north of it. There are also roads leading from Mêng-ka eastward to Si-na or Chih-na and thence to Ku-yung, south to Möng-tien and San-ta, and south-west through Su-tien to Sima.

MÖNG-KA (II).—LAT.  $23^{\circ} 24'$ ; LONG.  $100^{\circ} 37'$ ; HEIGHT 3,750 feet.

## A Shan State in the Wei-yüan district.

The town is situated in a plain which altogether is about 15 miles long and 3 or 4 miles wide. It is, however, much cut up by rather high-lying ground covered with jungle and too high to be irrigated. The main paddy plain measures about 3 miles each way and is near the lower end of the valley. The town is situated at the south end of this paddy plain. Above the town the ends of low jungle-covered spurs close in, after which the ground again opens out into two small paddy plains one above the other. Down the middle of the plain runs the Namhka from south to north, a stream running in a sandy bed 40 yards wide, but in April with only 15 yards of water in it, 1 foot deep.

*The town.*—The town consists of two parts—a Shan town of 150 houses on the left bank of the Nam-hka and a Chinese bazaar village of 50 houses on the right bank. The town is unwalled, but the two *pōngyi kyaungs* and the *Sawbwa's* palace, which are in the Shan town, have mud walls 10 feet high round them. The houses are all built of mud or soft bricks, some of them with tiled roofs, but most of them thatched. The Shan town stands on rather higher ground than the Chinese village. To the east and north is the paddy plain, but to the south and west the jungle comes close up to the town and would give cover almost up to the houses.

*Inhabitants.*—The inhabitants of the plain are chiefly Shans, but there are a good many Chinese among them. There are also about 20 Panthay houses in the town, of which 15 are in the Shan town. The surrounding hills are inhabited chiefly by Chinese.

*Transport and Supplies.*—Small quantities of beef, pork, paddy, and rice are obtainable. There are a few mules in the plain, but the principal source of transport in the State is the Panthay village of Hsi-mêng-chan, which lies on the hills 6 or 7 miles south-west of Mêng-ka near the Mao-mieh (Waw-myet) road. This village contains about 75 houses and is said to possess 400 or 500 mules.

The State is under a Shan *Sawbwa*, and there is also a small Chinese official. There is no garrison.

MÖNG-KA (III).—LAT.  $24^{\circ} 20'$ , LONG.  $98^{\circ} 30'$ .

\* A Chinese village in Möng-hkwan containing several hundred houses, and said to be walled. The village owns large numbers of mules.

It lies on one of the roads from Möng-hkwan to Chê-fang.

MÊNG-KO.—LAT.  $23^{\circ} 14'$ ; LONG.  $99^{\circ} 17'$ ; HEIGHT 4,100 feet.

A Chinese-Shan town, the head of a small State of the same name.

The town is situated on a spur running from north-west to south-east into a triangular paddy plain, watered by the Nam-tum. There is no wall round the town, which consists of about 100 houses and an outlying hamlet said to have been burnt by the Was in March 1900. In the centre of the town is the *Sawbwa*'s house, a large brick building, surrounded by a wall.

There is a bamboo hedge round the city, strengthened on the outside by a light double bamboo fence. Each face is pierced with an arched gateway.

*Supplies*.—A bazaar is held every fifth day outside the west gate, but only small quantities of supplies are procurable.

The town is commanded by the hills to the west.

*Camping-ground*.—The best camping-ground is in the paddy-fields close to the east gate of the town.

*Government*.—The *Sawbwa* nominally rules the three States of Mêng-ko, Möng-tum and Möng-hsung. He is directly subject to the sub-prefect of Chên-pien, but is really in the hands of the Was, who inhabit the neighbouring hills.

*Communications*.—The road from Kun-long and Mêng-ting to P'u-êrh Fu lies through the State, crossing it at Man-hpa, some miles south of the capital. There is a more direct road to Mêng-ka, crossing the Nam-ting to Ho-pang and joining the Mêng-ting route at Nam-pan, 2 marches short of Man-hpa.

[*Davies, 1895; Tuzner, 1900*].

MÖNG-KUAN.—See Möng-hkwan.

MÖNG-KYEN (MÊNG-CHIEN)—LAT.  $23^{\circ} 43'$ . LONG.  $99^{\circ} 20'$ ; HEIGHT 1,850 feet.

A small Chinese-Shan town, the capital of a small district of the Kêng-ma State situated on the left bank of the Nam-ting. Above the town the valley is very narrow, but here widens out into a triangular cultivated plain each side about 1 mile long. Besides the town, there are about 8 Shan villages in the plain.

The town is unwalled and is built on the edge of the jungle. It contains about 60 houses and is built in two parts, with a *póngyi kyaung*, surrounded by a mud wall, between them. The bazaar is in the lower part close to the river.

Ordinary supplies could be obtained in small quantities and there is good grazing all the year round.

The district is under a *Hta-möng*, appointed by the *Sawbwa*, of Kêng-ma.

The Nam-ting here runs in a bed of sand 350 yards wide, the breadth of the river in March being 80 yards. It is navigable for small boats as far as Kun-long. The river is fordable at the town in the dry season, but in the rains has to be crossed by boat. See "Nam-ting" in "Gazetteer of Rivers."

*Communications.*—The town is on the main road from Kun-long ferry to Shun-ning. Roads also go east to Kêng-ma and north to Möng-cheng (Chén-k'ang). From Möng-kyen to Kun-long the road follows the valley of the Nam-ting, but upwards there is said to be no road along the river. (Davies, 1895).

MÖNG-LA, (I).—See Ssü-Mao.

MÖNG-LA, (II).—See Hsip-sawng Panna.

MÖNG-LONG.—See Lung-Ling.

MÖNG-LUNG.—See Hsip-sawng Panna.

MÖNG-MAU.—See Möng-Mow.

MÖNG-MAW.—See Wei-Yüan T'ing.

MÖNG-MÖNG (MÊNG-MÊNG).—Latitude 23° 28' longitude 99° 48'; height 3,800 feet.

A Shan State between Kêng-ma and the Mekong.

The town lies in a plain about 7 miles long and 1½ miles wide with the Nam-möng running down the middle of it in a

south-south-west direction. The plain is well cultivated and contains 15 or 20 villages besides the town and there are numerous side valleys with small paddy plains running up them.

*The town.*—The town is built on a spur about half-way down the plain on the east side of it and runs down this spur for 500 or 600 yards. At the top is a *póngyi kyaung*, which commands all the rest of the town. The *Sawbwa*'s palace is roughly in the middle and is surrounded by a brick wall varying from 6 to 12 feet high. Right at the bottom are the bazaar sheds and here there is a Chinese suburb of 10 or 12 houses. Altogether the town contains about 400 houses, all built of mud, some with thatched roofs and some tiled. There is no wall round the town.

*The Nam-möng in Mêng-mêng.*—The Nam-möng is here from 80 to 100 yards wide flowing with a moderate current in a sandy bed. In April it is only 1 foot deep. Close to the town it is crossed by a foot-bridge and ford. The river is said to be always fordable, and there are no ferries across it.

*Inhabitants.*—The inhabitants of the plain are Shans, except the village of Ving-tem (called Yin-tien by the Chinese) just across the river from the town, which contains 80 houses, inhabited by Chinese. There are also 10 or 12 Chinese houses in the bazaar village at the bottom of the town. In the hills round the plain Chinese are in the majority, but there are also villages of Las, P'u-mans, and La-hus.

*Supplies and transport.*—Considerable supplies of beef, paddy, and rice could be got. Tea also is produced in the neighbouring hills. There are no mule-traders in the State and very little in the way of transport could be got.

*Government.*—The *Sawbwa* pays tribute to Shun-ning. Besides the surrounding hills he has under him the district of Mêng-k'u, which lies on the Nam-möng 8 or 9 miles above Mêng-mêng.

The boundary to the east between Mêng-mêng and territory administered by Chén-pien, is the ridge just to the west of the village of Möng-wai, where the Mêng-ka Mêng-mêng road crosses it; to the west the Mêng-ma-Mêng-mêng boundary lies about  $\frac{3}{4}$  mile west of the village of Ya-sai.

*Communications.*—Mêng-mêng is a somewhat important junction of roads. It is on the main road which connects Shun-ning Fu and Mien-ning T'ing with Möng-nyim, Möng-lem and the Chén-pien district generally. To the west the main road to Kun-long ferry goes through Kêng-ma and Mêng-ting, though possibly a shorter route could be found through Mêng-sung and Singa and direct from the latter place through the La (or Wa) country to Kun-long without touching Mêng-ting. To the east the direct road to P'u-êrh Fu and to Ssü-mao T'ing lies through the Ta-huan ferry and Mêng-chu branching off to P'u-êrh Fu and Ssü-mao T'ing respectively at P'a-tê after crossing the Wei-yüan Chiang. There is also a road from Mêng-mêng by Ta-pêng ferry to Mêng-ka and Wei-yüan, by which P'u-êrh Fu can be reached. [Davies, 1895].

MÖNG-MOW (MÊNG-MAO).—Latitude 24° 1'; longitude 97° 53'; height 2,500 feet.

A Shan State on the Shwe-li, called Maing-maw by the Burmese.

*General description.*—The plain runs east-north-east and west-south-west and is about 30 miles in length and 6 miles wide, entirely cultivated with paddy and bounded by hills. For the greater part of this 30 miles the Shwe-li runs in two channels, and roughly speaking the villages to the north of the northern channel are in Möng-mow, while those south of the southern channel belong in the upper part of the valley to Se-lan and in the lower part to Nam-hkam, both British Shan States under the Theinni Sawbwa. On the island between the two branches the villages are pretty equally divided between Great Britain and China. The hills on the Möng-mow side of the valley, which rise to about 5,500 feet are bare except on the top, but the hills to the south are thickly wooded and reach a height of nearly 7,000 feet. Above the large paddy-plain and separated from it by 2 or 3 miles of low grassy spurs, which run down from the hills on the north, is another group of about 15 villages on both sides of the Shwe-li and extending up the right bank of the Nam-yang for some 8 miles. The hills to the north of Möng-mow up to the Nam-wan-Shwe-li watershed also belong to the State.

*Inhabitants.*—The inhabitants of the State are Shans. These Möng-mow Shans, together with the Shans of Nam-

hkam, Se-lan, and the lower part of the Chê-fang valley, form a race of Shans differing slightly in dress and dialect from the real Chinese-Shans. They are sometimes called *Tai-mow* or "Möng-mow Shans" as distinguished from the *Tai-no*, "Northern Shans", who are the real Chinese-Shans. The latter, both men and women, dress entirely in very dark blue; the men do not have large ear-holes, and the women wear turbans a foot or more high. Among the *Tai-mow*, the men have large ear-holes, and usually wear white coats and white turbans put on crooked. The women often wear petticoats with large checks of red, white, and green, and have low turbans with a coloured fringe hanging down on each side. The differences in language are small and the *Tai-mow* dialect much more closely resembles the Chinese-Shan than it does the Shan of Theinni and Moné. There are also some regular Chinese-Shans in the State, especially in the capital.

There are generally one or two Chinese traders in the town during the cold weather, but there are no Chinese permanently living in the State, as it is considered very unhealthy by them. The hills are chiefly inhabited by Kachins, but there are a good many Palaung villages both on the hills and at the foot of the hills.

*Boundaries.*—To the north the top of the range of hills separates Möng-mow from Mong-wan; to the north-east the Nam-le, a small tributary on the right bank of the Shwe-li forms the Möng-mow Chê-fang boundary, which form the mouth of the Nam-le crosses the Shwe-li and runs along the Loi-mun range, which divides the Shwe-li from the Nam-yang, as far as the head of a small dry nullah running into the Nam-yang, a few yards below the ford on the main Se-lan-Wan-teng road. The boundary runs down this nullah, separating Möng-mow from Wan-teng, the village of Loi-mun belonging to the latter, and Hpa-hpaw to the former. Hence the Nam-yang down to its mouth and the Shwe-li from here on to its bifurcation divide Möng-mow from the Theinni districts of Kyinyang and Muse. On the island between the two branches of the river about half the villages belong to Möng-mow, the other half being in Se-lan and Nam-hkam, both districts of Thienni. Below the junction of the two branches, the Shwe-li down to the mouth of the Nam-hkam, forms the boundary between Möng-mow and Nam-hkam, except that the villages of Kun-hai, Nawng-ma, Man-hsawn,

Hang-lai, Kun-kyeng, and Kawng-nawng, on the right bank belong to Nam-hkam, and Kuntat on the left bank belongs to Möng-mow. From here the Nam-hkam forms the boundary between Möng-mow and Mo-meit till the Nam-mak joins it. Hence the Nam-mak divides Möng-mow from the Bhamo district till the junction of a very small stream on its left bank, the Saga-hka. It then follows this up to its source, crosses the ridge between Nam-hkai and Man-na, and descends the Nam-hkai-hka to its mouth crosses the Nam-wan, and ascends the ridge mentioned above as the State's northern boundary.

*Government.*—The State is governed by a Shan *Sawbwa*, who pays tribute to the Chinese official at T'êng-yüeh. The Shan villages are divided into districts each under a *kang*, the head-quarters of the *kangs* are at Man-mawn on the Nam-yang, Se-lö, Nawng-hkam, Tung-hko, Se-hsing, Lown-pok, Nawng-hok, Ma-nai, Nawng-sown.

The authority of the *Sawbwa* over the Kachins and Palaung in the hills is very nominal, and many villages pay no tribute or taxes. Some of the villages near the frontier have, however, of late years voluntarily paid tribute to Möng-mow, so as to become Chinese subjects and avoid coming under British rule.

*Trade.*—A very large trade is done between Möng-mow and Bhamo chiefly by means of pack bullocks. The chief export to Bhamo is rice. The chief imports are cotton, cloth, thread, salt, and dried fish.

*Supplies.*—Very large supplies are obtainable of beef, rice and paddy. A few vegetables, ducks, pigs and chickens are also to be got. There are five-day bazaars held at the following villages:—

Möng-mow town.	Seh-seng.
Man-mawn (on the Nam-yang).	Mong-pying.
Se-lö	Nawng-tow.
Ta-pye.	Ho-tong.

Man-mawn (on the Nam-kam).

*Transport.*—There are no mules in the State. Pack bullocks are to be got in very large numbers. Probably 1,000 would be obtainable in the whole valley including Nam-hkam and Se-lan. There are one or two boats in each river side village. Coolies could be obtained and there are a good many professional

carriers who trade with baskets, and would therefore make good coolies.

*The Shwe-li and the Nam-wan at Möng-mow.*—The Shwe-li where it runs through the Möng-mow plain is a river from 130 to 250 yards wide, with a gentle current in the dry weather, flowing over a sandy bed. Through the greater part of the plain the river is split up into two channels. The northern of these two channels has the wider bed and was formerly the principal stream. Now, however, it is getting drier while the southern channel is getting larger every year. On the road from Se-lan to Möng-mow the southern channel is 150 yards wide and quite unfordable, the northern channel is 30 yards wide and 1 foot deep. The southern channel is often called the Nam-paw, and possibly this river, which now joins the Shwe-li near Pang-hkam, originally ran down this southern channel and joined what was then the main stream at Man-kun. The Shwe-li is here constantly changing its course and old channels are to be seen in several places.

*Navigation, Ferries, and Fords.*—See Gazetteer of Rivers.

*The Nam-wan.*—The Nam-wan, where it runs through a bit of the Möng-wow plain, near its mouth is from 50 to 100 yards wide with a moderate current, waist deep in the dry weather, but unfordable in the rains. It is navigable for boats up to where it comes out of the hills near Kut-long. There are ferries at Kut-long, Nawng-mun, Ma-nai-taü, Man-hsawn (in Nam-hkam).

*Town of Möng-mow.*—The town is situated at the foot of the hill about a mile from the right bank of the northern branch of the Shwe-li.

*Defences.*—The town is nearly oblong in shape, but the western side is slightly irregular. The long sides of the oblong run north and south, the eastern face being 700 yards long and the western face 850 yards. The northern and southern sides are 500 yards long. The town is surrounded by a hard brick wall 16 feet high and 2 feet thick. It has no ditch, but is backed up on the inside by an earth parapet 13 feet high, 20 feet thick at the bottom, and 6 to 8 feet thick at the top. The wall thus forms a sort of outside revetment to the parapet, and stands up 3 feet above it, so that men are intended to kneel on top of the parapet and fire over the wall. The whole of it is

in very fair repair and there are only two places—one in the west and one in the east side—where it could be climbed, though there are some places where a man might get up by climbing on another's shoulders. All these places could be easily made good in a short time, and the wall would have to be breached or sealed with ladders, or one of the gates blown in.

There are four gates, one in the middle of each face. The gateway in each is a double brick arch, one inside the other, the two arches being about 15 yards apart, the outer arch in a line with the city wall. For 15 yards on each side of the inner arch is a wall 20 feet high, and the part of the wall for 15 yards on each side of the outer arch is also raised to a height of 20 feet. These two short lengths of high wall are joined at each end, and the whole of the space inside filled in with earth except the roadway: thus for 15 yards on each side of the gate is a parapet 45 feet thick, revetted inside and outside by walls 20 feet high. The roadway through the arches is 12 feet wide and the gates are of wood 2 inches thick and are in both arches. These wooden gates are not meant for defence, and if the place was besieged three of the gateways would probably be filled up with earth.

*Surroundings and point of attack.*—To the north of the town is paddy-ground for 500 or 600 yards, and beyond the hills begin to slope gently up. To the east and south is a large paddy-plain. To the south-west is a marsh  $\frac{3}{4}$  mile long and from 300 to 400 yards wide; this marsh is not out of a man's depth in the dry weather, but is muddy and full of weeds, and forms a very serious obstacle; it is about waist deep over the greater part of it. To the west are low grassy spurs cut up by nullahs.

The town is built on ground elevated 15 or 20 feet above the paddy-plain, and on the north side the wall runs along the edge of the bank which divides the elevated ground from the paddy level. Consequently on this side the town wall commands the ground in front of it for 500 or 600 yards, though it is itself commanded from the lower slopes of the hills at a distance of 700 or 800 yards. To the east and south, however, the wall is 100 yards behind the bank, so that troops advancing from either of these sides, though they would be under fire at first, would, when about 200 yards from the town, be covered by the bank, and would be able to advance from there

to the foot of the bank, 100 yards from the town, without being fired on. The west side would be the easiest to attack from. A small hill commanding the town at a range of 700 yards would make a good artillery position and many more places could be found on the lower slopes of the hills at a greater range. Advancing on the town across the grassy spurs to the south of the hill, troops would, owing to the configuration of the ground, only be under fire for about 230 yards before arriving at the nullah. From here they would be entirely under cover from the town and could approach by this nullah to within 30 yards of the west gate. The nullahs might also be entered above the town at the foot of the hills and descended without being under fire. Even advancing by the main road from the west, which goes along the northern edge of the marsh, troops would, owing to the steep bank along the foot of which the road passes, not be under fire from the western face of the town till within 100 yards of it, and would only suffer from diagonal fire from the southern face.

*Houses, &c.*—The houses are all built of wood and are packed very closely together. There are about 500 houses inside the walls; there are no houses near the town outside the wall. The palace is a little to the north of the centre of the town, and is a small wooden building in a dilapidated state with a courtyard in the middle surrounded by a brick wall 4 feet high and 1 foot thick, each side of it about 100 yards long.

*Water and camping-grounds.*—There is good water from a nullah and from the stream (4 yards  $\times$  6 inches) which flows past the northern and eastern face. There are large camping-grounds everywhere. The grassy spurs on the west would make a good place to camp on.

The town wall of Möng-mow is said to be bigger than that of any other Chinese-Shan State, or of any other town to the west of the Salween except T'êng-yüeh.

*Communications.*—From Möng-mow to Chê-fang, there are five roads. All are the same as far as the Ying-kyim ferry over the Shwe-li, thence the five roads are as follows:—

1. Up the Nam-yang valley into Wan-teng territory, and cross by the Nyek-fak pass into the Chê-fang plain.
2. From Man-mawn across Loi Kaihtaw to the Shwe-li opposite La-le and up the left bank of the Shwe-li.

3. From Npah-paw across Loi-mun to Hwe-hawm.
4. As in No. 2 as far as the Shwe-li at La-le, cross the river and up its right bank to Man-pying.
5. By Nos. 1, 2 or 3 to Hwe-hawm, and cross the Shwe-li to Ho-hkawng.

No. 1 is the main trade route; Nos. 2 and 3 are not such good roads; Nos. 4 and 5 would be used to go to Man-pying or other villages on the right bank of the Shwe-li,

There is now no road down the right bank of the Shwe-li from La-le to Möng-ka. There is communication by boat with Chê-fang and Nam-hkam. The road to Se-lan crosses the southern branch of the Shwe-li at Nawng-mo. The road to Nam-hkam crosses the river at Ho-hsai or at Nawng-hok. The road to Möng-wan ascends from the capital and descends to Nam-lam in the Möng-wan valley. The roads to Bhamo are either across the Mong-wan plain, or by one of the Nam-hkam-Bhamo routes. [Davies, 1894].

#### MÖNG-MYEN.

There are two places of this name—

- (I) The Shan name for T'êng-yüeh,
- (II) The Shan name for Mien-ning-T'ing.

See under latter headings.

#### MÖNG-NA.—See Kan-ai.

MÖNG-PAN (MÊNG-PAN).—Latitude 23° 7'. Longitude 100° 32', height about 4,000 feet.

A Shan State to the east of the Mekong.

The plain in which the town is situated appears to measure about 6 miles each way. The Nam-pan, a stream 8 or 10 yards wide, runs through it. The town is at the north-western end of the plain and there appear to be 10 or 12 other villages in it. About two-thirds of the plain appear to be cultivated, the rest covered with jungle.

The town is unwalled and contains 50 or 60 houses. It is a poor district and very little in the way of supplies or transport could be got from it.

The Sawbwa of Möng-pan rules over a considerable tract of country. The western boundary of the State is the Mekong, which separates it from Chén-pien. To the south the Nam-toi or Ta-k'ai Ho, a tributary of the Mekong, divides it from Ssü-mao district. To the east the Wei-yüan Chiang forms its boundary with Lu-chuan, a Shan State, under Ssü-mao. The Möng-pan Sawbwa is under the Wei-yuan *T'ing-kuan*.

*Communications.*—The road to P'u-érh Fu or Ssü-mao T'ing goes through Mēng-chū. To the north there are roads to Mēng-ka and Mao-mieh (Waw-myet). To the west the road to Mēng-mēng crosses the Mekong by the Ta-huan ferry and the road to Möng-nyim-nö by the Mawk-lai ferry [Davies, 1895].

MÖNG-SING.—See Möng-Hsung.

MÖNG-SU.—See Mong-Chu.

MÖNG-TI. (I).—Latitude 24° 49'; longitude 98° 22'; height 3,600 feet.

Also called Nan-tien. A Shan State on the Nam-ti between T'ēng-yüeh and Möng-na. Nan-tien is the name of the Chinese town about a mile and a half from the Shan capital, and the whole State is called Nan-tien by the Chinese. It is called Maing-hti by the Burmese.

*General description.*—The State is one of the largest of the Chinese Shan States, and occupies a considerable tract of country between the Nam-ti and Shwe-li; it extends also to the left bank of the Shwe-li, but has no territory on the right bank of the Nam-ti. Besides the Möng-ti valley it includes Möng-hum and Möng-yang and all the hills round these Districts. The Möng-ti plain extends for about 15 miles down the left bank of the Ta-ping; it is quite bare of trees, and the paddy plain is not more than 1 or 1½ miles wide; but beyond the paddy plain the hills at first rise very gradually, so there is another mile or two of grassy spurs nearly level before the actual foot of the hills is reached.

*Inhabitants.*—The inhabitants of the plain are Shans and Chinese, the former being probably in the majority. The town of Nan-tien and some of the plain villages are almost entirely Chinese, and most of the villages have both races living together in them. This is the first place on the Bhamo-T'ēng-yüeh road where Chinese are at all numerous.

The hills of the State are almost entirely inhabited by Chinese; there are no Kachins, but both on the hills and at the foot of the hills there are some Hsang villages; and there are a few Palaungs and Hkalas. The latter race are said to dress like Chinese. The same name Hkala is sometimes applied by the Shans to the Tai-loi or Hkun-loi of Keng tung, a race of Palaungs; and these are possibly the same as the Hkalas of Möng-ti. The Hkalas are found in the hills throughout this part of Yun-nan to a great extent.

*Boundaries.*—To the south-west Möng-ti is separated from Möng-na by the Nam-cheh-kung, a tributary on the left bank of the Nam-ti. From here up to the mouth of another of its tributaries, the Nam Hsawng, the Nam-ti forms the western boundary of the State dividing it from country directly under T'êng-yüeh and to the north the Nam-Hsawng separates it from T'êng-yüeh. To the north-east the hills running down to the Shwe-li above Möng-wang divide it from territory under T'êng-yüeh. To the east the Shwe-li Nam-hkwan watershed divides it from Möng-hkwan and Chê-fang; to the south and south-west the watershed dividing the Nam-hum on the north from the Nam-wan, and Nam-hsa on the south, separates it from Möng-wan and Ho-hsa.

*Government.*—The State is under a Shan *Sawbwa* who pays tribute to T'êng-yüeh. The town of Nan-tien, however, and the neighbouring village of San-sha-chai are not under the *Sawbwa* but pay taxes direct to T'êng-yüeh.

The State is divided into districts under *kangs* whose head-quarters are at the following villages: Hypin-san, Man-pying, Yin-cha-chai, Ta-sang and Pang-hin. All these are Chinese except the *kang* of Man-pying, who is a Shan.

*Trade.*—There is a certain amount of trade carried on with T'êng-yueh and Bhamo and the neighbouring States. It is chiefly in the hands of the Chinese.

*Supplies.*—Large supplies of the ordinary kind, beef, pork, ducks, paddy and rice could be got. Bazaars are held every five days at the capital, and at Nan-tien, Ta-sang and Man-tong.

*Transport.*—Mules could be got in considerable numbers. Pack bullocks are not numerous.

*The Nam-ti at Möng-ti.*—The Nam-ti where it passes through Möng-ti territory is as a rule fordable, but after heavy rain it has to be crossed by boat. There is a ferry from Nan-tien across to Man-hsa-ko, and there is an iron chain suspension bridge at Hsin-chai Ho-hkö on the road to Möng-na. The river is not navigated; and there are no boats in this part of its course, the ferries being crossed by raft.

*The town.*—There are two towns about  $1\frac{1}{2}$  miles apart, the upper town called Se-nö by the Shans and Shang-ch'êng by the Chinese, and the lower town, called Se-tau by the Shans, and Hsia-ch'êng by the Chinese. *The upper town* is situated on slightly rising ground about  $\frac{1}{2}$  mile from the left bank of the Nam-ti and  $\frac{1}{4}$  mile from the foot of the hills. It is about 500 yards long and 350 yards wide, the long sides running approximately north and south. It contains about 500 houses inhabited principally by Chinese, with some Shans. It is surrounded by a soft brick wall 10 feet high and it is entered by two gates in the southern face, one in the northern and one in the western. The town is commanded from the hills  $\frac{1}{4}$  mile off to the east, and also by a spur  $\frac{1}{2}$  mile off to the south-east which runs out into the plain a little on the east of the road from the lower town.

*The lower town.*—This is where the *Sawbwa* lives. It is inhabited by Shans and Chinese, the former being in the majority. It is, like the upper town, situated a little above the paddy plain level, about  $\frac{1}{4}$  mile from the river on the west and  $\frac{1}{4}$  mile from the hills on the east. It contains 300 or 400 houses, and is surrounded by a soft brick wall 8 feet high. It is entered by two gates in the south side, one in the west, and one in the north. The *Sawbwa*'s palace is in the middle of the town to the east of the main bazaar street, which runs from the more westerly of the south gates to the north gate. The houses are chiefly of soft brick. The town is commanded from the hills to the east at a range of about  $\frac{1}{2}$  mile.

*Communications.*—Möng-ti is at the junction of the main trade routes from Bhamo to T'êng-yüeh, one road coming in from Möng-wan and Möng-hüm, another through Ho-hsa and Möng-hum, and a third which is now the main road joining in from Man-waing and Möng-na. There is a road to the south-east through Möng-hum and Möng-yang to Möng-chi and thence branching off on the one hand through Möng-hkwan

to Lung-ling, on the other to Chê-fang. The road to Möng-mow and Nam-hkam lies through Möng-wan. To the north-east there is a road to San-si. [Davies, 1898].

MÖNG-TI (II).—Latitude 24° 15', longitude 99° 25'; height 2,600 feet.

A district of Chen-k'ang (Möng-cheng).

The plain is 2 miles long by  $\frac{1}{2}$  mile wide and contains three or four villages besides the town, the total population being between 500 and 600, all Shans. The plain is cultivated and the Nam-ti runs down the centre, being in February, 10 yards wide and 1 foot deep.

The town contains about 50 houses. The place is of little importance and supplies are only obtainable in small quantities and there are few mules or ponies. There is a small bazaar, every five days.

The Chinese headman of the district has the title of *Lu-ta-tsung* and resides at Mêng-huan. [Davies, 1898];

MÖNG-TING (MÊNG-TING).—Latitude 23° 33'; longitude 99° 4'; height 1,800 feet.

Sometimes called Hun-ting by the Chinese, though they also call it Mêng-ting.

A Chinese Shan State on the Nam-ting. The town lies in a plain about 10 miles long and 3 miles wide running from north-east to south-west with the Nam-ting skirting its northern edge. Only the lower 6 miles of this plain belong to Mêng-ting, the upper half being part of Kêng-ma. The Mêng-ma part of the plain is called Ting-no or the Upper Ting and the Mêng-ting part of it is called Ting-taü or Lower Ting.

There are several villages in the plain, perhaps about 12 or 15 in the lower or Mêng-ting part of it, but there is a large amount of uncultivated ground and the valley could support a much larger population.

The inhabitants of the plain are Shans, partly Chinese Shans and partly Southern Shans. The hills are inhabited by Las and Chinese.

The town contains 150 houses and is built in two parts about 2 miles away from the Nam-ting on both banks of its tributary the Nam-wa, a stream 15 yards wide and 1 foot deep. The

principal part where the *Sawbwa* lives is on the right bank of that stream on slightly rising ground. The *Sawbwa's* palace, 100 yards square is enclosed by a mud wall about 8 feet high, 1½ feet thick, and loop-holed. Beyond this the town is un-walled. On the left bank of the Nam-wa is the bazaar village, in which a few Panthay traders live during the dry season. There are large camping-grounds and good water and grass. Fairly large supplies could be obtained of the ordinary kind and in the cold season there are generally some mule and bullock caravans at the town though the inhabitants do not trade very much.

*The Nam-ting at Mêng-ting.*—The Nam-ting where it passes through the Mêng-ting plain is from 80 to 150 yards wide and in March is from 4 to 6 feet deep with a fairly strong current. It is navigable for boats and rafts down to its mouth at Kun-long and up to Mêng-chien. *For list of ferries, see Gazetteer of Rivers.*

*Government.*—The State is under a Shan *Sawbwa*, who pays tribute to the Chinese official at Yung-ch'ang. The State appears to be fairly quiet and well governed. Its boundary with Kêng-ma to the north-east is the Nam-kun stream which runs into the Nam-ting 2 or 3 miles above the town. To the south-east independent La country divides it from the districts of Mêng-ko and Mêng-tum which are under Chênpien. The last Möng-ting village along the Möng-tum road is Pang-maw. To the south-west and west the State borders on Theinni, a small stream called the Nam-hsang dividing it from the Kun-long circle. To the north it is bounded by Kêng-ma.

*Communications.*—Möng-ting lies on the main road from Kun-long to Shun-ning. There are also roads going east to Kêng-ma and south-east through Mêng-sung to Chen-pien or to P'u êrh and Ssüi-mao. The main road to Kun-long crosses the Nam-ting at Hpak-cheo, about 4 miles from the town and thence goes down the right bank of the river. The road down the left bank to Ho-pang is said to be very difficult for animals owing to steep rocky hills running right down to the river.

(Davies, 1895).

MÖNG-TUM (MËNG-TUNG).—Latitude 23° 9'; longitude 99° 18'; height 4,100 feet.

A Chinese Shan town and head of a small circle under the *Sawbwa* of Mêng-ko, who is subordinate to the Chinese official at Chén-pien.

The plain is about 4 miles long and  $\frac{1}{2}$  mile wide, watered by the Nam-tum (15 yards wide, 2 to 3 feet deep, with a sluggish current). In February 1900 it contained six prosperous villages, but these have since been destroyed by the Was, as well as a portion of Möng-tum, and the people have migrated to Kêng-ma.

The town is situated on the south-east slopes of a wooded spur on the left bank of the stream and contains about 100 houses, including several large *wats*. The houses are built of soft brick and there is a bazaar-square in the lower part of the town.

There is no wall, but a rough bamboo hedge surrounds the town. Trade is small and supplies poor.

Camp accommodation for 2 battalions could be found about  $1\frac{1}{2}$  miles north of the town, near a large white Pagoda on the road to Mêng-ko. Water, fuel and grass are plentiful

(Turner. 1900)

MÖNG-WAN.—Latitude  $24^{\circ} 20'$ ; longitude  $97^{\circ} 59'$ ; height 3,100 feet.

Called Lung-ch'uan by the Chinese and Mowun by the Burmese.

A Chinese Shan State on the Nam-wan, a tributary on the right bank of the Shwe-li.

*General description.*—The Möng-wan plain is about 30 miles long, 8 miles wide at the south-west end, and  $1\frac{1}{2}$  miles at the north-east end. A great part of the south-west portion of it is taken up with low grassy spurs which are not cultivated. The actual paddy plain measures about 5 miles across in the middle and gradually decreases to a width of  $\frac{1}{2}$  a mile at each end. Above the town, also beyond the regular paddy plain, there are 7 or 8 miles of narrow valley with occasional villages and cultivated strips of ground. The greater part of the hills surrounding the plain are also in Mong-wan territory. These are all bare on their lower slopes, but are covered with jungle near the

*Inhabitants.*—The inhabitants of the plain are Chinese Shans. There is one Chinese village near the south-west end of the valley on the left bank of the river. It contains about 100 houses, built chiefly of soft brick. It is called Sang-hawng by the Shans, and Chang-fêng-kai by the Chinese; it is often spoken of by Shans, as *Man-che* or “the Chinese village.” In the capital also there are a few Chinese, but not many. The surrounding hills are inhabited by Kachins and Paiaungs with a few Lisaws to the west. At the foot of the hills to the east also there are some Palaung villages. Kachins are largely in the majority in the hills.

*Boundaries.*—To the west the Möng-wan boundary runs along the Burma China frontier. To the north-west a range of hills separates it from La-hsa and Ho-hsa. To the north the Nam-wan-Nam-hum watershed divides it from the Möng-hüm district of the Möng-ti State. To the east the Nam-man-Shwe-li watershed forms the Chê-fang boundary and to the south a continuation of the same watershed separates Möng-wan from Möng-Mow.

*Government.*—The State is under a Shan *Sawbwa* who pays tribute to T'êng-yüeh. The plain is divided into districts each under a *kang*. The *kangs* live at Sang-pa Pyingin, Nawng-kam, Wan-kang, Kying-khan, Hsung-tan, Man-ving, Taw-hkawng, Nawng-cheo, Na-hseng, Na-wan, Lai-wa, Ton-pyu, Te-hsa, Nawng-en, and Nam-htaw.

The *Sawbwa* has little authority over the Kachins and Palaungs on the hills, but many Kachin villages near the frontier have lately been voluntarily paying tribute to Möng-wan in order to become Chinese subjects and avoid coming under British rule.

*Trade.*—There is a considerable trade by means of pack bullocks between Möng-wan and Bhamo. The chief export is rice and the chief imports dried fish, salt, cotton cloth, and thread. The villages in the south-west, such as Man-en, Nawng-en, Na-hseng, Te-hsa and Sang-hawng seem the most prosperous trading villages.

*Supplies.*—Large supplies of beef, rice, and paddy could be got in the Möng-wan plain; and pigs, chickens, and ducks are procurable. There are no sheep or goats. The south-eastern half of the plain is the richer. Very little grass is

to be got in the valley in January, and it would be still more scarce in April, but is abundant in the end of May, and in June. Animals are fed on straw in the dry weather. Grass could be procured from near the tops of the surrounding hills 2,000 feet above the plain.

Five-day bazaars are held at Möng-wan town, Sang-pa Kying-khan, Nawng-sawn, Na-hseng, Nawng-hung and Sang-hawng (Chang-fêng).

*Transport.*—Large numbers of pack bullocks could be got in Möng-wan: probably 500 would be obtainable.

*The Nam-wan in Möng-wan.*—The river rises in the hills to the north of Möng-wan and flows right down the length of the plain. It is from 25 to 50 yards in width and 2 or 3 feet deep from January to June with a moderate current and sandy bottom.

*Bridges and fords.*—The river is fordable in most places in the dry weather and could be forded by men in many places in the rains except immediately after heavy rain. There are no ferries. It is crossed by wooden bridges, rather shaky, but passable for animals at Möng-wan town, Taw-kum and Nam-htom.

*Navigation.*—The Nam-wan is not navigated here, and there are no boats in the State.

*The town of Möng-wan.*—The town is situated near the north-eastern end of the valley, at the foot of the hills, on the left bank of the Nam-wan, about  $\frac{3}{4}$  mile from it. It is approximately square, each side measuring about 400 yards, and is built half on the level of the paddy-plain and half on the end of a very low spur 30 or 40 feet above this level, so that the northern half of the town commands the southern half. There are now no fortifications, but there appears to have been formerly a wall round the town, and the remains of it are to be seen in a soft-brick loop-holed wall 9 feet high and 2 feet thick extending from the north-west corner for 150 yards along the northern face, while for 20 or 30 yards on each side of the east and south gates are walls of the same kind. The houses, of which there are about 300, are built of soft bricks with tiled roofs, closely packed together, with narrow, badly paved streets between them, like a Chinese town. The blocks of houses are usually surrounded by a soft brick wall 3 to 7 feet

high and 1 to 2 feet thick. The palace which is a little to the north of the centre of the town, is surrounded by a wall 9 feet high and 2 feet thick, its sides measuring 150 by 40 yards, the interior space being divided into two court-yards, with houses built round them. In the north-west corner is a guest-house in an enclosure 80 yards square surrounded by a wall 7 feet high and 1 $\frac{1}{2}$  feet thick. The bazaar sheds are outside the town near the south-west corner.

*Surroundings and points of attack.*—To the north are gardens enclosed by walls 3 feet high for the first 300 yards, and beyond these open grass land, cut up by nullahs. To the east is a belt of paddy 400 yards wide, and beyond it steep bare hills; the hill to the south-east 500 yards off, being almost precipitous. To the south is a belt of paddy 300 yards wide, and beyond this open grassy spurs. To the west are paddy-fields stretching right across the valley.

The town commands the ground near it to the east and west. To the north, gardens would give cover for the last 300 yards, and this side could be approached without coming much under fire from the town by following a nullah, which has steep sides 30 feet high and is 15 yards wide at the bottom.

There would, however, be more difficulty in getting into the town from this side owing to the wall which comes down from the north-west corner. The southern face would be the easiest to attack. This side could be approached without coming much under fire to within 300 yards of the town where there is a mud bank 3 feet high, and 1 foot thick about the same level as the upper part of the town. From here to the town there is a slight dip, crossing some paddy-fields with a stream 6 yards wide and 1 foot deep running down the middle; this last 300 yards would be under fire from the town, but this face is easy to enter as there is no wall except for 20 or 30 yards on each side of the gate.

*Communications.*—To Bhamo there are two main routes both leading from the lower part of the valley, (1) through Pang-yau, Hang-tong Law-tan, and Kye-tin; (2) through Hpak-hkum (Szi), Möng-wai and Chi-ri. To Möng-mow the road leads down the valley to Nam-lam and then crosses the hills. The road to Man-waing, Santa, and Mong-na passes through Ho-hsa. A direct road to T'êng-yüeh runs, *via* Sha-mu lung and Nan-tien, up the east side of the valley.

[*Davies, 1901*].

MÖNG-WANG.—*See* Hsip-Sawng Panna.

MÖNG-WAW.—*See* Wei-Yüan-T'ing.

MÖNG-WU.—*See* Hsip-sawng Panna.

MÖNG-YU.—*See* Yün-Chou.

NAN-TIEN.—*See* Möng-Ti;

NAN-YING.—*See* Wan-tien.

NAWNG-YANG.—*See* Shang-ch.ang.

PANG-HAK.—*See* Shang-chiang.

PO-NGAI (PAI-AI).—Latitude  $23^{\circ} 55'$ ; longitude  $105^{\circ} 55'$ .

It is a busy village, and important as being the extreme limit of navigation on the Yu-Chiang, between Nan-ning Fu in Kuang-hsi and Yün-nan. It is the *likin* station for goods crossing the Yün-nan and Kuang-hsi borders by this route. There are no landing stages, and goods have to be carried up to the godowns over the sharp edges of slanting strata. The place is said to be very malarious.

The Yu Chiang is here 60 yards wide and has a fall of about 3 feet 6 inches per mile; rapids are numerous below Po-ngaï, but only one sufficient to necessitate the disembarkation of passengers. The boats that ply between Po-ngaï and Pai-sê T'ing, 45 miles down stream, are very light and narrow, about 40 feet in length and 3 feet beam, drawing rather less than 1 foot of water.

The village is connected by telegraph with Yün-nan Fu and Pai-sê T'ing.

P'U-ÊRH FU.—Latitude  $23^{\circ} 3'$ ; longitude  $101^{\circ} 19'$ ; height 4,650 feet.

Called Möng-hpo by the Shans.

The principal official town of the southern division of Yün-nan. The town is built at the northern end of a plain 4 miles long and  $1\frac{1}{2}$  miles wide, at the foot of a hill dividing the two branches of the P'u-êrh Ho, which join each other at the bottom of the plain. Besides the main plain there is a consider-

able amount of fairly level ground running up each branch of the stream above the town, this level ground extending up the eastern branch for 4 or 5 miles. The two branches are both small streams 7 or 8 yards wide and easily fordable. The plain is well cultivated and villages are fairly numerous along the foot of the hills on both sides.

*The town.*—The town is more or less rectangular, but somewhat irregular in shape. Its long sides, which run north and south, are about 550 yards long and its short sides 500 yards. The wall is made of brick, is 20 feet high and 1½ feet thick and is backed up on the inside by a parapet 15 feet high, 10 feet thick, and revetted and paved with brick. There are four gateways consisting of arches 11 yards long, the gates being of wood 4 to 6 inches thick, with a thin plate of iron on the outside. There are no traverses to the gateways. The main street runs down the middle of the town from north to south. The space near the middle is fairly well filled with houses, but round near the wall there are vegetable gardens, and just inside the north-west corner is a fair-sized pond. To the north a hill runs down to within 200 yards of the wall and commands the town. To the east and west also the foot of the hills is not more than 500 yards off, separated from the town by the two branches of the P'u-êrh Ho, neither of which form any obstacle. From the south gate there is a street stretching south-west for about ½ mile and on the north, east and west sides there are scattered houses which would give cover.

*Supplies and transport.*—Considerable supplies could be got in P'u-êrh, and mules are constantly passing through to and from Ssü-mao T'ing and the tea hills. Flour and large yams are obtainable. Ducks and geese are to be found in the plain. All the ordinary supplies, such as beef, pork, paddy, rice, tea and coarse sugar are obtainable in large quantities, besides peas, spinach, and green mustard. There is good grazing in April, but probably grass would be scarce earlier in the dry season.

*Trade.*—Ssü-mao T'ing is the large commercial town of the neighbourhood and there is very little trade done in P'u-êrh.

*Government.*—P'u-êrh is the headquarters of the Yi-nan or southern civil division of Yün-nan province and is, therefore, the residence of the *Tao-t'ai* or Commissioner. It is also the headquarters of a General or *Chén-t'ai*. The district of the

*Hsien-kuan* of P'u-êrh is called Ling-êrh Hsien. The districts of Ssü-mao, Chén-pien, and Wei-yüan, and the Shan State of Keng-hung are all under the *Fu-kuan* of P'u-êrh. The *Fu-kuan*'s district, therefore, touches Shun-ning to the north-west, Yung-Ch'ang to the west, and borders on British territory to the south-west and south. The *Fu* districts of P'u-êrh and Shun-ning are under the *Tao-t'ai*, as well as the *Chih-li-T'ing* district of Ching-tung.

*Communications*.—From P'u-êrh there are roads to the north-west to Yung-ch'ang through Mien-ning and Shun-ning, to the north-north-west to Ta-li, to the north-east to Yün-nan Fu, to the east through Lin-an to Mêng-tzü and Tong-king, and to the south through Ssü-mao to Keng-Hung and Keng Tung.

To Kun-long the following two roads appear to be the most direct:—

- (1) Through Mêng-chu, Mawk-lai terry, Möng-nyim-nö Möng-nyim-taü, Mêng-sung, and by direct road through the La (or Wa) country to Ho-pang and Kun-long.
- (2) Through Mêng-chu, Mêng-pan, Ta-huan ferry, Mêng-mêng, Kêng-ma and Mêng-tin to Kun-long.

Probably the first of these would be found the shorter. To Mandalay the shortest way from P'u-êrh would probably be through Mong-lem. [Davies, 1895].

Intermediate office on the Yün-nan Fu, Ssü-mao T'ing telegraph line.

PU-HSUNG.—See Chén-pien T'ing.

PU-TENG.—See Hsip-Sawng Panna.

SAN-SI.—Latitude 25° 3'; longitude 98°11'; height 3,300 feet.

Called Chan-hsi by the Chinese. A Shan State on the Ta-ping.

*General description*.—The main part of the San-si plain extends along both banks of the Ta-ping and its small tributary the Nam Ho-kwan or Hsiao-kuan Ho for a length of about 7 miles and an extreme breadth of 3 miles narrowing down at each

end. The general direction of the length of the plain is from north to south. Besides this there are also a few villages in the narrower part of the Ta-ping valley above and below the main plain.

*Inhabitants.*—The bulk of the inhabitants of the plain are Chinese Shans, but there are also a good many Chinese living in the State, especially in the villages of Kuan-chang, Se-hkam, and three or four others. The hills to the west are inhabited chiefly by Kachins with a few Li-saws. To the east the hills are inhabited by Chinese and Li-saws.

*Government.*—The San-si *Sawbwa* formerly had the rank of *An-fu-szü* and had the same powers as other Shan *Sawbwases*. The brother and predecessor of the present man, however, raised a rebellion against the Chinese Government, and in consequence his rank was reduced to that of *Fu-yi*, which puts him on a par with the headman of Mêng-ka, and he now only rules a few villages which have purely Shan inhabitants. The Chinese and half Chinese villages in the plain are under a Chinese official, also a local man, with the rank of *Shen-ssü*, and he has as much power or perhaps more than the *Sawbwa*. Besides these two there is an official called a *Hsün-kuan*, who appears more directly to represent the authority of T'êng-yüeh and has jurisdiction over the Chinese and Kachins of the surrounding hills, though as far as the Kachins are concerned his authority is very nominal. The present *Sawbwa* lives at Htawn-hpaw (T'uan-p'o), which is the capital of the State. The *Shen-ssü* lives at Kuan-chang and the *Hsün-kuan* lower down the valley at Se-hkam.

*Fort.*—The fort is about 100 yards square and surrounded by a loop-holed mud wall about 6 feet in height and 2 feet thick. It is commanded from rising ground on the left bank of the river 500 or 600 yards off, and is also commanded from the hills to the north at a distance of about a mile. There are said to be two guns in the fort, but they are probably of no account.

*Trade.*—There is a little trade done by San-si traders with T'êng-yüeh, Myitkyina, and Sa-don, but it is very small.

*Transport and supplies.*—The State is said to possess about 200 pack mules. The land in the plain is fairly good, and the

people are neither very rich nor very poor. Paddy and rice could be got in fairly large quantities; beef, geese, ducks, and chickens are obtainable, but the State could not supply a large force for long. There is no grass to speak of in the cold season, and animals are fed on straw. Camping-grounds and water are plentiful, and the whole plain is under paddy cultivation.

*The capital and other villages.*—The capital, which is called Htawn-hpaw (T'uan-p'o) contains about 100 houses. It is built in an oblong shape 300 by 150 yards on the right bank of the Nam-ho-kwan, about  $1\frac{1}{2}$  miles from the Ta-ping. It is surrounded by a loopholed mud wall about 10 feet high and 2 feet thick, with several gaps in it, and has a ditch outside the wall with 1 or 2 feet of water in it, which would form no obstacle to speak of.

Though Htawn-hpaw is the capital it is by no means the biggest village in the plain. The village of Se-kow contains about 200 houses, and Se-hkam which is near the south end of the plain is said to be larger still. Nearly all the villages on the right bank of the Ta-ping are surrounded by mud walls 6 or 8 feet high and  $1\frac{1}{2}$  to 2 feet thick, meant for protection against the Kachins. They are not kept in repair and have numerous gaps in them. Those on the left bank of the river are unwalled.

*The Ta-ping and Nam-ho-kwan at San-si.*—The Ta-ping just above the San-si plain is a rocky stream 30 or 40 yards wide and 3 or 4 feet deep, with a very swift current. Where it enters the plain its current becomes slower and it broadens out to a width of from 60 to 80 yards with a depth of 5 feet in January. It is crossed by ferry at (1) Kuan-shang, (2) Se-hkam, and (3) Hseng-hpa. There are fords at (1) Se-kow, (2) Nawng-man; these are waist-deep in January and impassable in the rains. The banks of the stream where it passes through the plain are not as a rule high or steep.

The Nam Ho-kwan called Hsiao-kuan Ho by the Chinese, is from 7 to 15 yards wide and 1 or 2 feet deep and fordable all the year round.

*Communications.*—San-si is on the main road which connects T'êng-yüeh with the Upper Irrawaddy at Myitkyina. There are also roads to the north through Si-na to Ku-yung and south to Möng-na and San-ta. To T'êng-yüeh there are

two roads—(1) passing through Möng-long, Hsiao-ti-fang, Hsin-ch'in, and Mien-h'in, (2) further south passing through Möng-pong and Mien-ch'in [Davies, 1895].

SAN-TA or CHAN-TA.—Latitude 24° 42'; longitude 97° 57'; height 2,950 feet.

A Shan State on the right bank of the Ta-ping, called San-ta by Shans, Chan-ta by Chinese, and San-da by Burmans. It is also sometimes called Tan-ta and Möng-san by Shans.

*General description.*—The part of the State inhabited by Shans lies on the right bank of the Ta-ping beginning from the spur which runs down to the right bank of that river and divides San-ta from Möng-na, and running down to the head of the defile through which the Ta-ping descends to the Irrawaddy valley, a length of some 15 miles. The part of the plain on the right bank averages 2 or 3 miles in breadth, but near the town of San-ta the Nam-san-ta runs into the Ta-ping and there are villages and paddy-fields all up it, which would make the breadth of the valley from the Ta-ping to the foot of the hills 5 or 6 miles in this part of the State.

Besides the plain, the whole of the Kachin hills along our boundary from the Ta-ping up to the neighbourhood of Sima are under the San-ta *Sawbwa*, with the exception of a strip of country to the north of Man-waing, which with that town and its suburbs is a bit of Möng-ti territory, though entirely surrounded by San-ta. See under Man-waing.

*Inhabitants.*—The inhabitants of the plain are Chinese Shans, and there are Chinese in the capital and at Ho-hko, called T'ai-p'ing-kai by the Chinese. The bulk of the population in the hills is Kachin, but there are Chinese settlements at Sa-ma Pa, Mêng-tien, and other villages, and a few Pa-laungs and Lisaws, scattered about.

*Boundaries.*—To the north-east San-ta is separated from Möng-na by a spur which runs down to the right bank of the Ta-ping: from this point downwards the river forms the boundary between the two States, except that the four villages of Hwe-kwi, Now-tong, Htang-sang and Man-heo on the left bank nearly opposite Man-waing, and Ving-man and Nawng-him also on the left bank higher up the valley belong to San-ta. Below the plain to the south the river divides San-ta from

La-hsa ; and from the junction of the Nam-paung and Ta-ping northwards, the State runs along the Burma-China frontier. To the north it reaches San-si, the boundary of the two States lying between Mêng-tien and Mêng-ka.

*Government.*—The State is governed by a Shan *Sawbwa* who pays tribute to the Chinese official at T'êng-yüeh. There are seven districts in the valley each under an official called a *kang*. The *kangs* live at Sow-hsüng, Ingh-seng, Hsö-ming, Sang-hsi, Pa-chem, Nawn-peo, and Ung-lön.

*Trade.*—There are no bullocks in San-ta, but a small trade is done by men on foot carrying baskets. The chief exports to Bhamo are chickens and ducks, while needles, thread, cotton cloth, plates and cups, dried fish, and salt are taken back to San-ta. There are some Chinese mule-traders in the capital, but no large trade is done.

*Supplies.*—Large supplies of beef, paddy, and rice are obtainable and pigs, ducks and chickens are to be got. In some of the hill villages there are goats. Bazaars are held every five days at the capital and at Ho-hko (T'ai-p'ing-kai).

*Transport.*—There are no pack bullocks in the State. Considerable numbers of coolies can be got. There are some mules in the capital, but not many. There are one or two boats at most of the riverside villages.

*The Ta-ping and Nam-san-ta at San-ta.*—For a description of this part of the *Ta-ping*, see under Kan-ai.

The Nam-san-ta is a stream 40 yards wide, and fordable though immediately after heavy rain it is difficult. It is said to be crossed by a bridge near the town of San-ta on the road to Möng-na.

*Town of San-ta.*—The town of San-ta is situated about half-a-mile from the right bank of the Nam-san-ta, at the foot of a spur which runs down from the north. It is oblong in shape, 500 yards long by 300 yards. It has the remains of a loopholed brick wall, 6 feet high, round it, but this is never repaired, and the town can be entered almost anywhere. The *Sawbwa*'s palace, which is enclosed by a high wall, extends from the middle of the north-west face to the main road which runs right down the centre of the town from south-west to north-east. There are six main gates into

the town, three on the south-east face, one on the south-west face, one on the north-west face between the palace and the west corner, and one on the north-east face. To the north the town is commanded by a low grassy spur. To the north-east a road leads over very slightly rising ground, into the Chinese bazaar, which consists of a double row of shops 300 yards long with a broad paved road between them, along both sides of which stalls are set up during the big bazaar which takes place every five days. The houses in the bazaar are of soft brick, and each end is closed by a brick wall 6 or 8 feet high with a narrow doorway through it. This bazaar is inhabited exclusively by Chinese. Towards the east corner and along the south-east side paddy-fields separate the town from the Nam-san-ta, and on this side there are two or three villages between the town and the stream. To the west and south-west also are paddy-fields and the village of Se-taü beyond which is the Nam-hing, 500 or 600 yards from the town.

*Communications.*—The town of San-ta is just off the main trade route, which passes from Möng-na down the left bank of the Ta-ping, crossing the river near Man-waing. The road to Ho-hsa crosses the Ta-ping from Pa-chem to Nawng-sang, and ascends the hills to the east from Se-mu. The road to La-hsa ascends from Se-mu further down the valley. The usual road to Möng-na crosses from Na-ho-lem to Man-sang, and then goes up the left bank of the Ta-ping. To the west there are roads to Sa-ma Pa and to Mêng-tien; the main road to the Upper Irrawaddy leaves Mêng-tien to the north and goes through Sima. To the north there is a hilly road to San-si along the hills which run down to the right bank of the Ta-ping. [Davies, 1895.]

SE-FANG.—LAT.  $24^{\circ} 18'$ ; LONG.  $98^{\circ} 25'$ ; HEIGHT 2,900 feet.

Called Chê-fang by the Chinese, and Seh-pang by Southern Shans.

A Chinese Shan State lying along the lower part of the Nam-hkwan and along the Shwe-li, after the junction of the former river with it. It includes, in addition to the plains, the range of hills to the south, forming part of the Irrawaddy-Salween watershed. Eastward it extends into the drainage of the Nam-ko-lang, the headwaters of which form a portion of

its boundary with Möng-hkwan (Mêng-shih), and includes the In-lum pass.

*General description.*—The part of the State that lies in the plain may be divided into two parts. First, there is that part of it which is in the valley of the Nam-hkwan which contains the capital, and which consists of a paddy plain 18 or 20 miles long, and from 2 to 4 miles wide. It runs from north-east to south-west, and is closed to the north-east by the defile, through which the Nam-hkwan runs between Chê-fang and Möng-hkwan, while to the south-west, it ends at the Shwe-li where the Nam-hkwan joins it.

Below this is the second part consisting of a number of villages lying on the right bank of the Shwe-li in a narrow valley covered partly with jungle, but opening out occasionally into a stretch of poppy-land where tributaries join the main river. This part of the valley is some 10 or 11 miles long and is closed to the south-west by a defile through which the Shwe-li runs till it opens out near the Möng-mow village of Mêng-ka. Besides the plain, the surrounding hills up to the water-sheds are under the Chê-fang *Sawbwa*.

*Inhabitants.*—The inhabitants of the upper part of the plain as far down as Ho-la and Hin-hawn are Chinese Shans, but the villages below this are inhabited by Möng-mow Shans who differ slightly from the regular Chinese-Shans (see under Möng-mow), while in the lower part of the State along the narrow Shwe-li valley there are also a great many Palaungs mixed up with the Shans. In the town of Chê-fang there are 30 or 40 houses inhabited by Chinese who get a living by trading and keeping shops, and on the hills to the north-east, between Chê-fang and Möng-hkwan, there are several Chinese villages in Chê-fang territory. The rest of the hills all round are inhabited by Kachins with a few Palaungs. The number of Kachins in the State is said to exceed the number of Shans.

*Boundaries.*—Chê-fang is bounded on the north-west and north by the Möng-yang district of Möng-hti from which it is separated by the Shwe-li-Nam-hkwan watershed. On the north-east and east it is divided from Möng-hkwan by the hills which run down to the banks of the Nam-hkwan on each side. On the south it is divided from the Theinni districts of Möng-hko and Wan-teng by the crest of the hills form-

ing the Nam-yang-Shwe-li water shed. To the south-west the boundary between Chê-fang and Möng-mow is formed by a continuation of this watershed and by the Nam-le, a tributary of the Shwe-li on its right bank. To the west it follows the Shwe-li Nam-wan watershed.

*Government.*—The State is governed by a Shan *Sawbwa* who is under the Chinese official at Lung-ling. The villages in the plain are divided into eight districts, each under an official called a *kang*. The *kangs* live at the following villages: Se-kow, Ha-mun, Man-hai, Ho-la, Nam-pung, Hwe-hawn, Se-maü, and Nawng-hkam.

Among the Kachins in the hills there is a *Sawbwa* to every village or to every three or four villages. The Chinese villages to the north-east, ten in all, are under a Chinese *kang* who lives at Hsin-chai.

The taxation in the State under the present *Sawbwa* is very heavy, and in consequence many of the inhabitants have gone to live elsewhere.

*Surroundings and point of attack.*—The town is commanded from the rolling downs to the south-west, across which the route from Möng-hko via Nawng-cheo runs, and could be shelled from there.

A fairly good defensive position could be taken up running from the *póngyi kyaung* and the residence of the *T'u-ssü* northwards to a bare circular-topped knoll, and including the houses to the north of the main street; those to the south in this case would be demolished.

*Camps.*—The usual camp accommodation is a small grassy space to the west of the *pongyi kyaung* on the stream. Here there is accommodation for a battalion, but the ground is much soiled with excreta from innumerable caravans. A better camp for large parties would be on the high ground to the south of the Nam-lun, reached by turning west through the village of Na-yawn. Here there is accommodation for a brigade. Other camping-grounds are also procurable to the north-east of the town on the bare, high ground which slopes easily to the Nam-lum.

*Trade.*—The Chê-fang Shans are not great traders like those of Möng-mow. Most of their produce is taken away by Chinese

mule caravans from Lung-ling (Möng-long) and other places. Shan hats, walnuts and rice are the chief exports, and dried fish, cotton cloth, and salt the chief imports. There is no trade carried on by men on foot carrying baskets. There is a small trade, chiefly in bamboos, by river between Chê-fang and Möng-mow.

*Supplies.*—Chê-fang is considered a poor State compared with the other Shan States which surround it, but fairly large supplies of rice, paddy, beef, pigs, ducks and chickens are to be got in the plain; while besides these, sheep and goats are bred on the hills.

Bazaars held every five days at the town of Chê-fang, and at the villages of Ho-la and Nawng-hkam.

*Transport.*—Pack bullocks are not numerous, but they can be got in the villages of Ha-mun, Na-yawn, Ho-la, Hwe-hawm, Nawng-hkam, and Man-sang, to the number of about 300.

Mules are kept by Chinese in the capital and in the Chinese village of Hsin-chai and other places on the hills to the north-east to the number of about 500.

Coolies would be got among the Shans, but there are no professional basket carriers.

Boats on the Nam-hkwan and Shwe-li are not very numerous.

*The Nam-hkwan and Shwe-li at Chê-fang.*—The Nam-hkwan, when it passes through Chê-fang, is about 50 yards wide on an average, and is fordable in the dry weather, but has to be crossed by boat in the rains. There are ferries at (1) Se-ho-möng, (2) Se-kow, (3) Nawng-möng. The river is navigable for boats throughout the year in the Chê-fang plain, but owing to rapids they cannot ascend to Möng-hkwan.

*The Shwe-li or Nam-mow* is from 100 to 200 yards wide and is never fordable in this part of its course. It is crossed by ferries at (1) Nawng-yang-Man-pying, (2) Man-ten-Nawng-hkam, (3) Ho-hkawng, (4) La-le.

It is navigable throughout the year from where it enters the Chê-fang plain down to Möng-mow and Nam-hkam. Above Chê-fang it is not navigable owing to rapids.

*Town of Chê-fang.*—The town is near the north-eastern end of the valley at the foot of a low spur, on the left bank of the

Nam-hkwan and about  $1\frac{1}{2}$  or 2 miles from it. It is said to be built in a square each side about 500 yards long. It is surrounded by a wall of hard bricks 5 feet high and  $1\frac{1}{2}$  feet thick. A low bare spur runs down close to its eastern face and the other three sides are surrounded by paddy-land. The *Saw-bwa's* palace is built inside the eastern face, rather nearer the south-eastern than the north-eastern corner. It is an enclosure about 200 yards square, surrounded by a hard brick wall 8 feet high and 2 feet thick. South of the palace, in the south-eastern corner of the town, are shops kept by Chinese which are open every day, and the five-day bazaar is also held here. The rest of the town is taken up with Shan houses. The houses are most of them built of soft brick. Nearly in the middle of the town is a spring, the water of which the inhabitants drink, and from the spring a small stream runs out through the northern face of the town into the Nam-hkwan. The town is entered by three wooden gates, one each in the north, west, and south faces. The palace has also three gates, one each in its north, east, and south faces; the gate in its east face may also be considered as a gate leading into the town, as the east wall of the palace forms part of that face of the town.

*Communications.*—There are mule roads leading from Chê-fang in all directions to the neighbouring Shan States and Chinese towns. It is on one of the main trade routes which leads from Lung-ling to Nam-hkam and to Theinni. To the north-east there is a road through Möng-hkwan to Möng-hka and the Iron Bridge across the Salween. The main road to T'êng-yüeh goes through Möng-yang, Möng-hüm and Möng-ti; T'êng-yüeh can also be reached through Lung-ling.

To Möng-mow there are the following roads:—

- (1) Down the valley to Hwe-hawm, and turn southwards through the Nyek-fak pass into Wan-tien territory, thence down the valley of the Nam-yang, crossing the Shwe-li at Ving-kyim ferry to go to Möng-mow, or, keeping down the left bank of the Shwe-li, to Se-lan and Nam-hkam.
- (2) Keeping on from Hwe-hawm down the left bank of the Shwe-li to opposite La-le, thence crossing over Loi Kai-htaw to Man-mawn. This is a bad road.

- (3) From Hwe-hawm straight across Loi-mun to Hpa-hpaw.
- (4) From Man-pying down the right bank of the Shwe-li to La-le where the river is crossed by ferry, and on by No. (2).
- (5) From Mao-pying to Ho-hkawng, and cross by ferry to Hwe-hawm thence on by No. (1), (2), or (3).

Of these No. (1) is the regular trade route from the town of Chê-fang and No. (4) is the route most used by traders from villages on the right bank of the Shwe-li. There was formerly a road on from La-le down the right bank of the Shwe-li to Meng-ka, but, as the river passes through a defile here, the road had to be cut out of the side of the hill and was constantly giving way, so that it has now been abandoned.

There is communication by river from Chê-fang down to Meng-mow and Nam-hkam throughout the year.

To Meng-hkwan there are three roads:—

- (1) Ascend from Man-hkow to Hsin-chai and descend through Meng-hka to the Meng-hkwan plain at Nawn-hkam where the Nam-kaw-lang is crossed.
- (2) Ascend from Se-ho-meng to Pang-teng and down to Hpa-te where the Nam-kaw-lang is crossed.
- (3) Through Se-ho-meng and keep round near the left bank of the Nam-hkwan till Hpa-te is reached.

These seem about equal in length.

[*Davies, 1894; Walker, 1899*].

SE-KOW.—*See* Kan-ai.

SE-NO.—*See* Meng-ti.

SE-TAU.—*See* Meng-ti.

SHA-MU LUNG.—LAT.  $24^{\circ} 32'$ ; LONG.  $98^{\circ} 6'$ ; HEIGHT 6,100 feet. Called Pang-hak by the Shans and Kachins.

A Chinese village on the ridge of the hills dividing Meng-hum from Meng-wan, the boundary running through the middle of the main street. A pagoda, close to the village, on the top of the hills, forms a conspicuous landmark. The village

contains 60 houses. There is a small stone walled enclosure, 6 feet high, at the south-west end of the ridge, round a rather dilapidated old *yamen*, which is now used chiefly as an official rest-house. The village lies on the road which ascends from the Möng-wan and Ho-hsa La-hsa valleys to T'êng-yüeh.

*Supplies nil*, and only a very small camping-ground about a mile outside and beyond the village.

SHANG-CHIANG—LAT.  $25^{\circ} 30'$ ; LONG.  $98^{\circ} 50'$ ; HEIGHT 2,800 feet.

Called Nawng-yang by the Shans.

A district of Yung-ch'ang on the Salween, lying between the Lisaw State of Mao-tsao on the north, and the Shan State of Möng-hko or Lu-chiang on the south. To the west a big range of hills separates it from the Ta-t'ang and Kai-t'ou districts, and to the east it joins the Yung-ch'ang borders.

The plain, which lies along the valley of the Salween, is a poor one; the hills at times run straight down to the river, and at others open out to a width of 1 or 2 miles. It is inhabited by Shans, Chinese and Lolos, the first named being perhaps in the majority. On the neighbouring hills are found Chinese, Lolos, and Lisaws. Many of the Chinese are immigrants from Ssü-ch'uan.

The district is under the *Hsien-kuan* of Pao-shan in the prefecture of Yung-ch'ang. A *Hsün-kuan* resides at Chiu-lai-shan, a village in the hills on the right bank of the river.

The capital contains about 200 houses. There is very little trade in the district.

The ferries are given under the heading "Salween" in Gazetteer of Rivers. [Davies, 1898.]

SHANG-KAI-HSIN.—See Chen-pien T'ing.

SHIH-P'ING CHOU—LAT.  $23^{\circ} 48'$ ; LONG.  $102^{\circ} 38'$ ; HEIGHT 4,970 feet.

A prosperous, well-built town of considerable size and importance, lying at the north-west corner of the I-lung lake which is 14 miles long from east to west by 5 broad. The ground surrounding the lake is covered with paddy and poppy

cultivation. The town is walled and contains paved streets.  
[Bourne, 1886.]

SHUN-NING FU—LAT.  $24^{\circ} 35'$ ; LONG.  $99^{\circ} 51'$ ; HEIGHT 5,400 feet; called Möng-hkong by the Shans.

The capital of a district in western Yün-nan. Always called Shuen-ling Fu in Yün-nan.

*The town.*—The town stands in a valley about  $\frac{1}{2}$  mile wide with a stream from 12 to 25 yards wide called the Pei-ch'iao Ho running down the middle of it. The valley is well cultivated and runs south-east for about 24 miles with numerous small villages along it. For the first 15 miles it averages  $\frac{1}{2}$  mile in width, but below this it is narrower. The town stands near the head of this valley at the foot of the hills which bound it on the south-west. It is built in an irregular polygonal shape, measures about a mile in circumference, and is surrounded by a brick wall 15 to 20 feet high, backed up on the inside by a parapet from 3 to 10 feet thick. This parapet, owing to irregularities of ground, varies from about 6 to 14 feet in height, but is always built so that it is 5 or 6 feet lower than the wall. The wall has embrasures every four feet, and between each is a loophole; it is in fairly good repair. The town is entered by three gates on the north, east and south sides, respectively. The gateways are brick archways 15 yards long, the parapet, therefore, being about 45 feet thick for a length of some 15 yards on each side of the gate. The gates themselves are of wood about six inches thick, with thin iron plates on the outside. They have guard-rooms over them, but no traverses, except the usual short length of brick wall directly in front of the gate to keep out evil spirits. The town appears to contain 600 or 700 houses, and the space within the walls is fairly well filled up. The main street runs from the east gate through the town in a westerly direction.

*Point of attack.*—The town wall commands the road from Ta-li for the last half mile, but it is itself commanded from spurs to the south and to the north, the former at 300 yards distance and the latter at 600 yards. To the west a steep wooded hill rises up above the city, and to the east the town is commanded at a range of about  $\frac{3}{4}$  mile by the lower slopes of the hills on the other side of the valley. The spurs to the north and south of the town would afford good positions from

which to bring fire to bear on it, and the wooded hills to the west would allow an attacking force to get close up to the town walls under cover.

*Government*.—The district is under a *Fu-kuan*, subordinate to the *Tao-t'ai* of P'u-êrh. He has under him the district of Yün-Chou and Mien-ning and the Shan States of Kêng-ma and Mêng-mêng. Möng-nyim, one of the districts of Möng-lem is also at present under Shun-ning, though the hills surrounding it are in Chén-pien. To the north the Shun-ning district touches Mêng-hua, the boundary lying on the Ta-li road between the villages of Lao-niu-kai and Sha-sang-shao about latitude 25°. To the east it joins Ching-tung, to the south-east and south it borders on Chén-pien, and to the south-west and west on Yung-ch'ang.

There is also a *Hsien-kuan* or City Magistrate in the town. His district extends to the south-east down the valley as far as a gap through a spur called Kai-p'ai about 21 miles below the town of Shun-ning, which marks the Shun-ning-Yün-Chou boundary, the last village in this direction under Shun-ning being Jeh-shui-t'ang.

*Supplies and transport*.—Beef, pork, chickens, paddy, rice, beans, and other vegetables can be got in fairly large quantities, and a few potatoes are grown.

There are no large mule-owners, but a good many men own two or three mules or ponies. Perhaps 50 mules could be got in and near the town.

*Trade*.—There is no extensive trade, hardly anything but purely local commerce.

*Communications*.—Shun-ning stands on the road from Ta-li Fu to Kun-long and also on the road from Yung-ch'ang Fu, to P'u-êrh, and Ssü-mao. To Ta-li the main road goes through Mêng-hua, but there is a more direct road keeping to the west of the town of Mêng-hua. To Kun-long the most direct road is said to lie through Möng-cheng (Cheng-k'ang), but this is very hilly and is not much used. The main road goes through Yün-Chou, Mêng-lai, Mêng-sa, and Mêng-ting. The road is at present difficult, owing to there being no bridge across the Mêng-lai Ho at Mêng-lai, and the road round by Mien-ning is consequently often used, rejoining the Mêng-lai road at Wan-nien-chuang. This makes the journey two days longer. The

Mêng-lai Ho, however, is not a big river, and a bridge could easily be made across it.

The road to P'u-êrh passes through Mien-ning and Wei-yuan. There are also roads eastwards to Ching-tung and north-westward to Yung-ch'ang. [Davies, 1895.]

SSÜ MAO T'ING.—Lat.  $22^{\circ} 47'$ ; LONG.  $101^{\circ} 14'$ ; HEIGHT 4,850 feet.

Called Möngh-la by the Shans.

The town is situated in a plain 9 or 10 miles long and from 2 to 3 miles wide with a sluggish stream, 10 yards wide and 2 or 3 feet deep called the Mien Ho running down the middle of it from south to north. The plain is well cultivated and is surrounded by low hills. Villages are numerous all down each side, most of them near the foot of the hills.

*The town.*—The town, which has a population of about 15,000 is situated on the end of a low spur, raised about 100 feet above the level of the paddy plain. It is surrounded by a wall 25 feet high and 2 feet thick, backed up on the inside by a parapet 20 feet high and 10 feet thick, paved and riveted with bricks. The lower part, 3 feet, of the wall is made of stone, the upper part is of brick. It has embrasures every 5 or 6 feet and in each space between the embrasures is a loop-hole. It is well kept up and has been repaired lately in several places. It is entered by four gates, one at each side. The gateways are the usual brick arches about 10 yards long. The gates are of wood from 4 to 6 inches thick with a thin plate of iron on the outside. There is a small guard-room over each gate. The town is of irregular shape and is about 1,700 yards in circumference. The space inside is fairly well filled with houses. To the south there is a large suburb, where most of the merchants live and where all the trade is done. The upper part of this suburb is on the same level as the town, but it gradually stretches down to the level of the plain. Its main street is that which goes southwards from the south gate for about  $\frac{1}{2}$  mile. A little to the west of this is a large open space, in which a lot of matting and thatch huts have been constructed as market stalls. Here a market is held daily.

*Point of attack.*—The slope of the hills to the east is at first so gradual that the town commands all the ground within

1,000 yards of it. At distances beyond this, however, it is commanded from the hills to the east, and the hills to the west command it at about 2 miles distance. To the north there is a low bare hill the end of another spur, about 500 yards from the town. This spur is nearly the same level as the town wall, and between it and the wall is a deep hollow which by its steepness would afford cover from the fire of the town. This appears to be the best point of attack. On the south and part of the way round the east and west sides there are houses which give cover right up the walls of the town.

*Inhabitants.*—The inhabitants of the town and of the villages in the plain are mainly Chinese, but in the neighbouring hills there are many Lolos, chiefly of what the Chinese called the *Pai-chiao* tribe. Many of them have taken to Chinese customs, speak Chinese, and the women bind their feet. In the village of Tao-kuan-chai, about 4 miles south of the town, there are about 10 houses of Lu Shans. These are said to be the only Shans in the plain. The houses are all built of soft bricks or mud. Those in the town are roofed with tiles, but many of the houses in the suburbs and outside villages are thatched.

*Supplies and Transport.*—Supplies of beef, pork, paddy, coarse sugar, tea and rice are to be got in large quantities. Of vegetables, spinach, pumpkins, and large yams are obtainable. Flour is also to be got though not in very large quantities.

There are no great numbers of mules permanently kept in the Ssü-mao plain probably not more than 100 or 200, but during the tea season, which lasts from March to August, large caravans are constantly coming and going from other places.

*Trade.*—Ssü-mao is one of the largest trading places in Yün-nan and is a treaty port near the tea producing districts, but its position near the Shan States also makes it a centre of the cotton trade, and there is also a considerable trade in salt. The tea comes from Yi-pang, Yi-wu, Yo-lo, Man-sa, Man-la and other places, all lying from 6 to 12 marches off to the south in Keng Hung territory. The total production of tea is estimated at about 15,000 mule-loads a year.

The cotton trade is chiefly with Keng Tung and Möng-lem, the district of Möng-hai in the latter state being one of the principal producing places. The salt comes principally from

the Shih-kao-ching mine which lies a little to the east of the Ssǔ-mao-P'u-êrh road, 10 or 12 miles from the latter town. It is largely exported to the Shan States of Keng-Hung and Möng-lem.

*Government.*—Ssǔ-mao is a town of the “*T'ing*” class and the magistrate has the rank of “*Erh-fu*”. The Shan *Sawbwa* of Lu-shun, a district of Keng Hung, has jurisdiction over some of the villages in the Ssǔ-mao plain. The *Sawbwa* lives at Lu-shun, four days off south-west in order to be at a distance from Chinese officials. The Ssǔ-mao Magistrate is under the *Fu-kuan* of P'u-êrh.

*Communications.*—The tea districts lie to the east of the Mekong, from 6 to 12 marches from the town of Ssǔ-mao. To the south there is a road to Keng Hung and thence on to Keng-Tung. To the north the main road goes to P'u-êrh, from which town roads go north-west to Yung-ch'ang, north-north-west to Ta-li, north-east to Yün-nan Fu and east to Lin-an Fu, Mêng-tzü, and Tong-king.

To Kun-long the present main road goes through Mêng-Chu, Nan-pei ferry, Chen-lawt, Möng-nyim, Mêng-sung, and Mêng-ting. The following two routes would, however, probably be more direct:—

(1) Through La-hsa ferry, Chen-lawt, Möng Nyim, Mêng-sung and from Si-nga by a direct route through the La (or Wa country) to Ho-pang and Kun-long, leaving Mêng-ting some distance to the north.

(2) Through Mêng-chu, Mawk-lai ferry, Möng-Nyim-nö and on from there as in (1). [Davies, 1895.]

Connected by telegraph with Yün-nan Fu and T'ung-hai.

**T'A-LANG T'ING**,—LAT.  $23^{\circ} 26'$ ; LONG.  $101^{\circ} 56'$ ; HEIGHT 4,650 feet.

The plain in which the town lies runs roughly from north to south, is 5 miles long, but not more than  $\frac{1}{4}$  mile wide for the most part. It is well cultivated and watered by the Pi-hsi Ho 10 yards wide and 1 foot deep. There are a good many villages built at the foot of the hills bordering the plain. Most of the inhabitants of the town are Chinese, but in the villages of the plain the Wo-ni tribe is in the majority. The

population of the district is very mixed, and includes Ma-hei Pi-jo, Lolo and Shan tribes.

The town is built on the east side of the plain. It is surrounded by a wall of soft bricks, 20 feet high and 3 feet thick, backed by an interior parapet of earth 15 feet high and 4 feet thick, serving as a banquette. The wall is not in good repair, and there is a large breach just east of the south gate.

The town is surrounded by small suburbs, and in one of these outside the south gate, containing about 150 houses, are all the shops, the telegraph office, and the chief inn. There are several temples in and around the town, of which the biggest stands on the end of a spur commanding the north-east corner of the town.

The town is commanded on all sides at ranges from 400 yards upwards.

*Trade, Supplies and Transport.*—The principal importance of T'a-lang consists in its gold-mine which lies 9 miles to the north-east. There is a certain amount of trade with Ssü-mao in tea and with Mo-hei near P'u-êrh in salt, so that mules could be procured in fairly large quantities. Bullocks and cows are also used locally as pack animals. Supplies of the ordinary kind are obtainable in fairly large quantities and a little sugarcane is grown.

*Government.*—The Chih-li *T'ing-kuan* is subordinate to P'u-êrh Fu.

*Communications.*—The town stands at the junction of the main roads Yün-nan Fu and Ta-li Fu to P'u-êrh. [Davies, 1900.]

TA-LI FU.—LAT.  $25^{\circ} 42'$ ; LONG.  $100^{\circ} 5'$ ; HEIGHT 6,900 feet.

The principal town of Western Yün-nan.

The town is situated in a plain 2 or 3 miles wide and 30 miles long, running from north to south; it is bounded on the east by a lake, 30 miles long and from 3 to 7 miles wide and on the west by steep, and in many places precipitous mountains which rise to a height of 11,000 feet. The southern end of the plain is closed about  $\frac{1}{2}$  mile south of Hsia-kuan by a range of hills rising some 2,000 feet above the plain; its northern

end is closed at Shang-kuan, by the hills coming right down to the edge of the lake. For a breadth of about a mile from the foot of the hills the plain is covered with stones, and is little cultivated and chiefly used as a burial-ground; the lower half of the plain, that bordering on the lake for a width of 1½ or 2 miles, is all cultivated. The plain is full of villages, and several small streams run down from the hills to the west, many of them dry or nearly dry except in the rains. On the other side of the lake is a range of low reddish coloured hills, and the little valleys which run up from the lake into these hills have villages in them and are well cultivated.

*The town.*—The town is situated about 8 miles from the southern end of the plain. It is built about  $\frac{1}{2}$  mile from the foot of the hills on the west and 1 or 1½ miles from the lake on the east. It is surrounded by a stone wall and measures about 1,500 by 1,400 yards, the long faces running about north-north-east and south-south-west. The wall is chiefly of stone but has bricks in it in places. It is 30 feet high, about 2 feet thick, and is backed up on the inside by a parapet 30 feet thick and 24 or 25 feet high, so that the wall stands up 5 or 6 feet above the parapet and the latter forms a banquette to it. There are roads up onto the parapet, at each of the gates. The parapet is revetted with stone on the inside and is apparently paved with stone also, though the pavement is now covered over with earth. The wall has embrasures every 4 or 5 feet, and is loop-holed. The town is entered by four gates, one in each face, but none of them in the middle of the face. Those in the northern and southern faces are about opposite each other, 400 yards, from the north-western and south-western corners respectively. The gate in the eastern face is about 650 yards from the south-eastern corner, that in the western face is about 1,000 yards from the south-western corner. All, except the eastern gate, are protected by traverses. The traverse takes the form of a lower stone wall 20 feet high and 6 to 10 feet thick, enclosing a space about 30 or 40 yards square in front of the gate. This wall has a banquette to it and it is entered by a gate usually in the side, but in the case of the south gate there are two gates, one in the front face of the traverse exactly opposite the main gate, and the other in the east face of the traverse. The east face has merely the ordinary short detached length of brick wall built in front of it to keep out evil spirits.

*Government.*—Ta-li Fu is the residence of the *Tao-t'ai* or Commissioner of Yi-hsi, the western division of Yün-nan. The *Fu* districts of Ta-li, Li-chiang, and Yung-ch'ang are under him and the *Chih-li-t'ing* district of Mêng-hua. The *Hsien* district of the town is called T'ai-ho Hsien. The *Fu-kuan's* districts include Yün-lung Chou and Chao-Chou.

*Trade.*—Ta-li Fu is one of the biggest trading centres in Yünnan, but the trade is small. Of European goods quite an inappreciable quantity are to be found in the town. What there are consist chiefly of cotton and calico goods, thread, needles, a few blankets, and condensed milk. Raw cotton is at present by far the largest import. With regard to exports there is very little agricultural produce exported. In fact for the last two or three years the population of the plain have found it very difficult to support themselves. The following are some of the chief exports:—*white marble* which is quarried out of the hills to the west of the town and is sent all over China to be used for tomb stones; *straw hats* which are not worn much in China but are exported to the Shan States; *gold leaf*, which is sent to Burma, where it is used for gilding pagodas; *silk* which is brought down chiefly from Ssü-ch'uan and sent on to Burma.

*Point of attack.*—The town is surrounded on all sides by open cultivated ground. Outside the south gate is a large suburb, many houses of which are, however, in ruins. To the west bare steep hills begin to rise up about half-a-mile from the town, and the lower slopes of these command the town wall at a distance of 1,000 yards or less. This would be the best direction to attack from. Here a village affords cover about  $\frac{1}{2}$  mile from the town, and towards the western and northern gates, there are a few houses which would also give cover.

*Supplies and Transport.*—The following supplies are plentiful and could be got in large quantities,—rice, paddy, beef, pork, goats, mutton, chickens, straw, and vegetables of several sorts, including carrots, different sorts of yams, cabbages, beans, peas and occasionally potatoes. Oranges, apples, and pears are fairly plentiful. Grass can only be got in the rains and animals are fed on straw at other times of year.

Mules could be obtained in large numbers at Ta-li Fu and Hsia-kuan, probably about 3,000.

*Communications.*—Roads lead from Ta-li Fu eastward to Yün-nan Fu and westward to Yung-ch'ang, T'êng-yüeh, and Bhamo. The town lies 8 miles north of the main road from Bhamo to Yün-nan Fu, Hsia-kuan being actually on the road. Northward there is a road to Li-chiang and from there on through Ba-t'ang to Tibet. To the south is the main road to P'u-êrh and Ssü-mao and thence to Siam and Moulmein leading through Keng Tung. There is a direct but very difficult road which leads across the hills to Yang-pi (*see under Yang-pi.*) To Kun-long there are three roads,—*viâ* Yung-ch'ang and Mêng-po-lo; (2) *viâ* Shun-ning, Yün-Chou and Mêng-lai; (3) *viâ* Shun-ning and Möng-chêng. Probably the last would be found the shortest. [Davies, 1895].

Intermediate office on the Yün-nan Fu, Bhamo telegraph line and junction of the Li-chiang Fu branch line.

TA-MÊNG-T'UNG—LAT: 24° 31'; LONG. 99° 35'; HEIGHT 3,750 feet.

A Shan State under Yung-ch'ang Fu, called Möng-htong by the Shans.

The plain is 9 miles long from north to south, and about  $\frac{3}{4}$  mile wide with a stream 15 yards wide and 2 feet deep, running down the middle of it. It contains 15 to 20 villages, inhabited by Chinese and Shans, the former in the majority.

The new town, where the *Sawbwa* lives, stands on some rising ground on the west side of the plain and contains about 80 houses.

The old town, which lies on the east side of the plain, contains 100 houses and has a five-day bazaar.

The State comprises the plains of Ta-mêng-t'ung and Wan-tien.

Fairly good supplies are obtainable and a few mules.

*Communications.*—The road to the west to Lung-ling lies through Yao-kuan, to the north to Yung-ch'ang *viâ* Yu-tien. To the east a road goes through Mêng-yu to Shun-ning and Yün Chou, but to the latter town there is a more direct road to the south. [Davies, 1900].

TÊNG-CH'UAN CHOU.—LAT, 25° 59'; LONG. 100° 7'; HEIGHT 6,900 feet.

A small walled town about 20 miles north of Ta-li Fu, situated at the southern end of a small plain, and surrounded by a very low ruined wall, which would form no obstacle in many places.

The plain which lies on both banks of the Min-chia-ta Ho is well cultivated, containing about 20 villages, with a total population of about 4,000 Chinese and Min-chias.

The Min-chia-ta Ho is really a canal built by one of the Ming dynasty. It is 15 to 20 yards wide, with masonry walls, and embankments standing some 20 feet above the plain.

*Communications.*—The town is on the main road from Ta-li to Ho-ch'ing Chou.

T'ENG CH'UNG FU.—See T'ENG YUEH T'ING.

T'ENG-YUEH T'ING.—LAT.  $25^{\circ} 2'$ ; LONG.  $98^{\circ} 33'$ ; HEIGHT 4,450 feet.

Called Momien by the Burmese and in former reports.

Now elevated to the rank of a *Fu* city under the name T'ENG CH'UNG FU.

*The plain.*—The plain in which the town is situated measures about 5 miles by 3 miles and runs roughly north and south. It is bounded on all sides by bare hills which rise steeply up on the east side to a height of about 7,500 feet, but on the other sides the slope up is very gradual at first and some of the sloping ground has been brought under cultivation. The plain is covered with rice-fields and villages are very numerous, chiefly built at the foot of the hills, though there are some out in the plain as well. Many of these villages are very large. Yi-lo, which stretches along the foot of the hills to the south of the town, is said to contain over 1,000 houses, and Ta-tung, which lies near the south-east corner of the plain, is nearly as large. The Nam-ti or Ta-ying Ho locally called the T'ieh-shui Ho or Hsin-ch'iao Ho, a stream 20 yards wide and 3 feet deep, enters the plain from the north-east and flows in two branches along its north-west side uniting again opposite the south-west corner of the city and finally falls 60 feet over a waterfall into the Ho-shun-hsiang plain about  $\frac{1}{2}$  mile below the town. The two branches of this stream are crossed by small stone bridges close to the town, nearly opposite the north-west gate, and by a third and larger one about  $\frac{3}{4}$  mile lower down just above the waterfall. The western branch of this stream,

or that furthest from the city wall, flows between low boggy banks and has a muddy bottom, and would be difficult to cross except at the bridge. The other branch has firm banks and gravelly bottom and could be crossed elsewhere than at the bridge.

*The town.*—The town is built on the western side of the plain at a distance of about  $\frac{1}{2}$  mile from the left bank of the Ta-ying Ho. It is nearly square each side being about 1,150 yards long, but it is not built square to the points of the compass. Inside the city houses are rather thinly scattered about and there are large open spaces everywhere, especially to the north. The road leading out of the south-west gate for about half-a-mile beyond the walls is the main bazaar street. Numerous side streets go off from this, and this suburb is the most populous part of the town. Most of the principal merchants live here, as they dislike living inside the city, because the gates are shut every night at half-past nine. The whole town and suburbs are said to contain about 3,000 houses, of which 1,500 are within the walls.

*Defences.*—The wall with which the town is surrounded is from 25 to 30 feet high and  $1\frac{1}{2}$  feet thick, made of stone cut into blocks  $2\frac{1}{2}$  feet long and  $1\frac{1}{2}$  feet thick. It is backed up on the inside by an earthen parapet about 20 to 25 feet high and 20 to 30 feet thick; the top of the wall rises about 8 feet above this and is now of brick; there are embrasures all along the wall about 4 feet apart with a loophole in between; and below each embrasure is a loophole about 6 inches from the ground. The embrasures are too narrow to be of much use for guns and are probably intended chiefly for musketry fire. About 20 yards from the wall there has originally been a ditch all round, but this has now got very much filled up and at present forms no obstacle anywhere.

Four gates enter the town, one near the middle of each face. The entrances are tunnels 25 yards long, with a roadway about 10 feet wide. The gates are at the outside end of the tunnel and are 6 inches thick, made of wood, with a thin iron plate on the outside. They are double folding doors, fastened by bolts in the middle. For about 25 yards each side of the gateways the parapet is about 75 feet thick, and on top of this thick part is built a guard room with a roof supported on strong wooden posts.

The south-west gate has a traverse in front of it, of the usual type, consisting of a lower stone wall about 20 feet high and 10 feet thick, enclosing a space about 30 or 40 yards square in front of the gate. This space is crowded with small shops. There is a small tunnel and gate through each side of the traverse. There are no traverses to any of the other gates, or flank defences for the walls.

*Surroundings and point of attack.*—On the south-west the town is bordered by its thickly populated suburb for about  $\frac{1}{2}$  mile. Beyond this the ground is open, rising gradually up to a pagoda-topped hill. To the north-west between the town and the Ta-ying Ho the ground is fairly open, with a few houses, temples, and gardens scattered about. Beyond the Ta-ying Ho, which is  $\frac{1}{2}$  mile off, there are paddy-fields, and at the foot of the hills from  $\frac{1}{2}$  to  $\frac{3}{4}$  mile away, there are villages. Beyond this bare hills rise up gradually, commanding the town at a range of about  $\frac{3}{4}$  mile. To north-east the ground is open paddy-fields. To the south-east there is fairly open ground with a good many houses scattered about on it.

The approach from the south-west by the Bhamo road affords a good point of attack. As the road rounds the eastern slope of the pagoda-topped hill, it would command the town at a range of about 1,200 yards. The top of this hill is about a mile from the town wall and is 790 feet above it. Anywhere on this hill good positions could be got for artillery. From this hill onwards the houses and enclosures of this suburb would give good cover right up to the walls.

Against a force advancing from Sa-don by the San-si road the bare hills which lie to the north and north-west of the Ho-shun-hsiang valley and the short defile by which the T'êng-yüeh plain is reached from the Ho-shun-hsiang valley would afford several excellent positions to defend the road. The hills, however, are not inaccessible, and the positions could be turned by a wide flanking movement to the north before the force descended into the Ho-shun-hsiang plain.

*Inhabitants.*—The inhabitants of the T'êng-yüeh plain and the surrounding hills are all Chinese.

*Trade.*—T'êng-yüeh is the largest trading centre in Western Yün-nan. It is a Treaty Port; the greater part of its trade

is done with Bhamo, though there is also a considerable trade with Yung-ch'ang and Ta-li. Many of the principal Ta-li merchants are T'êng-yüeh men.

*Transport.*—Probably about 3,000 mules could be got in the neighbourhood of T'êng-yüeh, and mules are bred at Lu-ts'ung-shan, one or two marches north of T'êng-yüeh, between Pei-lien and Hsi-lien. There are said to be 600 or 700 brood mares here. A large number of the owners and drivers of the mule caravans trading with Burma along this main road live in the neighbourhood of Kan-lan-chai, the next stage (13 miles) beyond T'êng-yüeh.

*Supplies.*—Large supplies of beef, pork, ducks, geese, chickens, rice, paddy, tea, and vegetables could be got. Flour is also obtainable in small quantities. The shops are open daily, and there is a large bazaar every five days. The following supplies are obtainable, — peas, beans, potatoes, celery, carrots, onions, garlic, yams, bamboo shoots, cabbage, spinach, ginger, apples, pears, peaches, walnuts, mushrooms, salt, pepper, and betel. Potatoes are now to be got all the year round.

*Government.*—T'êng-yüeh is under a *T'ing-kuan*, who is subordinate to the *Fu-kuan* of Yung-ch'ang, though being on the border he has more freedom in political matters than other *T'ing-kuans* and is allowed to correspond direct with the *Tao-t'ai* at Ta-li on such matters.

There is a British Consul at T'êng-yüeh.

The district is bounded on the west and south by Burma. To the north it touches country inhabited by Kachins. To the north-east and east it borders on Yung-ch'ang, from which district it is separated by the range of hills which forms the water-shed between the Shwe-li and the Salween. To the south-east it touches Lung-ling district.

It includes the following Shan States:—

- (1) San-si (Chan-hsi).
- (2) Möng-ti (Nan-tien) including Möng-ho (Lao-pu-ssü-chuang) and Möng-yang (Hsiao-lung-ch'uan).
- (3) Möng-na (Kan-ai).

- (4) San-ta (Chan-ta).
- (5) Ho-hsa.
- (6) La-hsa.
- (7) Möng-wan (Ta-lung-ch'uan).
- (8) Möng-mow.

These states are all under their own *Sawbwas* and, except in taking tribute, the Chinese Government has not until lately interfered much in their internal affairs.

The jurisdiction of T'êng-yüeh also extends over many Chinese circles, of which the following are the principal:—

- (1) Tan-cha or Chan-cha. (2) Hsi-lien. (3) Mien-kuang.
- (4) Pei-lien. (5) Ch'ü-ch'ih-lien. (6) Kai-t'ou. (7) Ku-yung. (8) Mêng-ka. (9) Möng-pong. (10) Mien-ch'in. (11) Mien-lang. (12) Möng-hwe or Lung-chiang.

*Communications.*—From T'êng-yüeh main trade routes lead to Bhamo in one direction and to Yung-ch'ang and Ta-li in the other. There is a road to the east through San-si to Sa-don and Myitkyina and a road north-east to Ku-yung, from which Sa-don can also be reached.

To the north-east there is a direct road to Li-chiang through Pei-lien, Chin-chou, Yün-lung, and Chien-ch'uan. This road is very hilly, and the route round by Yung-ch'ang, though slightly longer, is considered better. To the south-east there are roads to Lung-ling. The shortest way to Möng-mow and Nam-hkam would be through Möng-ti, Möng-hüm, and Möng-wan. The shortest way to Möng-hkwan would probably be through Lung-ling, but to Chê-fang the road through Möng-ti, Möng-hüm, and Möng-yang would be quicker. [Davies, 1895; Murray, 1902.]

There is a post-office with bi-weekly post by runners to Bhamo.

Intermediate office on the Yün-nan Fu-Bhamo telegraph line.

TUNG-CH'UAN FU.—LAT.  $26^{\circ} 25'$ ; LONG.  $103^{\circ} 7'$ ; HEIGHT 7,250 feet.

The town lies in a plain, measuring about 6 miles from east to west by 3 miles wide at the broadest part. It is watered by the I-li Ho, which is 30 to 40 yards wide, and 2 to 5 feet deep, running across the western end of the plain from south to north. The plain produces good rice crops, but the winter crops of wheat and beans are not very successful, nor does opium thrive in the soil.

The town is built half way down the plain at its southern edge, and lies at the foot of a steep range of hills. It measures about 600 yards from east to west and 400 yards from north to south. It is surrounded by a wall 18 feet high, the top 8 feet being of brick and the rest stone. On the inside is an earth parapet 12 feet high and 10 feet thick, serving as a banquette. Each face is pierced by a gateway. The interior space is fairly thickly built over, there being about 500 houses within the town and as many more in suburbs outside the east and west gates.

*Point of attack.*—The town is commanded from the hills to the south at 800 yards range.

*Trade.*—The district contains many mines. Copper is mined in several places including T'ang-tan, 3 marches to the west. Lead is found at Kung-shan, 2 marches east-north-east. Here there is a mint for coining cash. Except in minerals the district is poor.

*Supplies and transport.*—Fairly good supplies can be obtained, particularly potatoes. Mule transport is largely used, and a considerable number of mules and ponies could be obtained.

*Government.*—The *Fu-kuan* is subordinate to the *Tao-t'ai* of Hsin-tien.

*Communications.*—The town lies on the main road from Yün-nan Fu to Sui-Fu. Roads also go north-east to Wei-ning, east-south-east to Hsüan-wei, south-east to Ch'ü-ching and west via Ch'iao-chia to Hui-li. [Davies, 1898.]

**T'UNG-HAI HSIEN.**—LAT. 24° 8' N.; LONG. 102° 49' E;  
HEIGHT 6,400 feet.

*The town.*—The town is situated at the southern end of a cultivated plain 9 miles wide, containing the T'ung-hai lake, a sheet of water 4½ miles long and 7 miles broad. It is

built at the foot of a low range of bare hills bounding the plain on the south. The town is square each side being 350 yards in long. It is surrounded by a stone wall 25 feet high and 2 feet thick, which is crenelated and loopholed between the embrasures, to allow of men firing kneeling. On the inside the wall is backed by a parapet of earth 20 feet high, topped by a stone-paved banquette 4 yards wide, revetted with brick. A dry ditch, 5 yards wide, skirts the entire length of the walls on the outside. Entrance is given by four gates, roughly at the points of the compass. These are surmounted by brick guard-houses in good repair. Entrance is gained through the usual bricked-in tunnels pierced through the parapet with a width of  $4\frac{1}{2}$  yards. The gateways are closed with wooden folding doors 6" thick, of the usual pattern and are further protected by traverses consisting of short lengths of wall loopholed but without interior parapets. The gateways are connected by paved streets 10 yards wide lined with good shops, and there are several important branch streets. Outside the south face of the walled town lies a populous suburb surrounded by a wall of sun-dried bricks.

*Point of attack.*—The town lies nearly a mile south of the lake and is surrounded on three sides by cultivated fields, the majority being poppy. On the south the town is commanded at short range by the hills at the foot of which it lies. From its size and position the town is of considerable military importance. It commands the main line of advance from the south via Mêng-tzu on Yün-nan Fu, this road debouching on the plain through a narrow and easily-defended defile  $\frac{1}{2}$  mile east of the town.

*Government.*—The *Hsien-kuan* is under the jurisdiction of the *Fu-kuan* of Lin-an.

*Trade and supplies.*—Being situated on a main trade route the commerce of the town is flourishing. The shops are of better quality, and the goods offered for sale of greater variety than in any other town except the capital. The usual supplies in considerable quantities could be obtained, and 700 or 800 ponies or mules might be procured in the vicinity.

*Camping-ground.*—The plain in which the town lies offers extensive camping accommodation and the water-supply is good and plentiful.

*Telegraph.*—The telegraph office is situated in the south-east corner of the walled town. T'ung-hai is the central station of the telegraph system for the south of the Province. One line goes north to Yün-nan Fu, whilst branches go south-east and south-west, respectively. The former passes through Mêng-tzu, where a line continues south to Man-hao and thence *viâ* Lao-kai to Tong-king. Another line goes east from Mêng-tzu through Ka'i-hua Fu and Kuang-nan Fu to Pai-se, whence it proceeds *viâ* Nan-ning Fu to Canton.

The branch leaving T'ung-hai on the south-west passes through Yüan-chiang Chou and T'a-lang T'ing to P'u-êrh Fu and Ssü-mao T'ing.

*Communications.*—T'ung-hai is on the main trade route which connects Yün-nan Fu with Tong-king, the road passing south through Hsin-fang and Mêng-tzu to the Red river at Man-hao. This is also the line of the French railway. (Fraser, 1900).

WAN-HSANG.—See Yung-ch'ang Fu.

WAN-TIEN.—LAT.  $24^{\circ} 32'$ ; LONG.  $99^{\circ} 22'$ ; HEIGHT 2,400 feet.

A small Shan district on the lower part of the Yung-ch'ang river.

It is divided into two parts by the hills which close in on the river. The upper plain is called Shang-wan-tien by the Chinese and Möng-ya by the Shans, the lower Hsia-wan-tien by the Chinese and Möng-hka by the Shans.

The inhabitants of both plains are Shans, as the district is too feverish for the Chinese.

The upper plain contains eight small villages, of which the largest is called Lao-ch'ang by the Chinese and Nan-ying by the Shans. It is considered the capital of the district and contains 30 or 40 houses.

The lower plain is said to contain six small villages. The hills around the plain are inhabited thinly by Chinese and Lolas.

The district is under the Shan *Sawbwa* of Ta-mêng-t'ung Möng-tung.

The Yung-ch'ang river is here 50 to 80 yards wide, and the ford on the main road at Man-hai is 3 feet deep in December. The current is very strong, and after rain the river is unfordable. There are no rafts or boats in the plain, and the stream is unbridged.

The district lies on the road from Lung-ling to Shun-ning Fu. [Davies, 1900].

WAW-MYET.—LAT. 23° 13'; LONG 100° 32'.

A Shan State in the Wei-yuan district called Mao-mieh by the Chinese.

The State is said to lie along a very narrow valley, watered by a small stream, which lower down joins another stream called the K'un-lung Ho and runs into the left bank of the Mekong.

The inhabitants of the valley are chiefly Shans, but the surrounding hills are principally inhabited by Lolos. The town is on the right bank of the stream, a little way up the hillside. The whole State is said to contain 1,000 houses.

The plain grows very little paddy; the chief source of wealth in the State is the salt mine, which is in the valley.

[Davies, 1895, from native information.]

WEI-YÜAN T'ING.—LAT. 23° 30'; LONG. 100° 56'; HEIGHT 3,150 feet.

Called Möng-waw or Möng-maw by the Shans.

The town lies in a plain 12 miles long and  $2\frac{1}{2}$  miles wide, with the Wei-yüan Chiang or Nam-Waw running down the middle of it from north to south. The plain is much cut up by low spurs which run out into it from both sides, and there are very few irrigated fields compared to the size of the plain. Villages are numerous all down the plain, and the houses are built of mud, with tiled or thatched roofs.

*The town.*—The town is on the right bank of the river at the end of a spur about 600 yards from the river-bank. It is in two parts—the old and the new town, the latter being built to the north of and touching the old town.

The total circumference of the two is about 1,700 yards and the shape very irregular. The wall of the old town is 18

feet high and 2 feet thick; it is made of stone except the upper 5 feet, which are of hard brick. It is backed up on the inside by a parapet 10 feet thick and 13 feet high, paved and revetted with brick. It has four gates, facing approximately the points of the compass; the gateways are arches 10 yards long; the gates themselves have fallen. The old town being now deserted, there are only about 15 houses in it and two or three temples. There are large breaches in the wall at the north-west corner and close to the east gate.

The new town is surrounded by a loopholed wall 15 feet high and 3 feet thick. The bottom 3 feet are made of large stones not squared, but put in as they are of all shapes and cemented together with mud: the upper part of the wall is of soft mud bricks. There is no banquette, the loopholes being 4 or 5 feet from the ground. The new town is entered by one gate in the east side and one in the north side, and there is a large breach in the wall leading into the *pongyi kyaung* in the south-east corner. The *Sawbwa* lives in the new town which contains about 50 houses inside the walls and 60 in a suburb to the east, nearly all inhabited by Shans.

The bazaar village, which is close to the river,  $\frac{1}{4}$  mile east of the town on lower ground, contains about 70 Chinese houses and 15 Panthay houses, and the officials and garrison live here. It is in one street about 500 yards long, and some of the houses have mud walls round them, but there is no regular wall round the whole village.

The old town is built on slightly higher ground than the new town and commands both it and the bazaar village. It is commanded from the spur above it to the west from a distance of about 600 yards and from the hills to the east at a range about  $1\frac{1}{2}$  miles.

*Inhabitants.*—The inhabitants of the plain are chiefly Shans, but there are Chinese in the bazaar village close to the town and a few in many of the other villages in the plain.

*Transport and supplies.*—The Panthays in the bazaar village own 50 to 60 mules, and there is a village about a mile north of the town on the same bank of the river called Hsing-ying-p'an in which are about 20 Panthay families who own about 100 mules. Besides these there are very few mules. Counting these Panthays' mules there are perhaps 200 in the valley.

No large supplies could be got. It is not a large trading place, and there is no great amount of paddy grown in the plain. A certain amount of beef, pork, paddy and rice would be obtainable.

There is good grazing in April.

*Trade.*—The principal trade in the State is from the salt mine called Hsiang-yen-ching, which is about 6 or 7 miles south of the town on the left bank of the Wei-yuan Chiang.

*Government.*—The town of Wei-yuan is of the *T'ing* class under the *Fu-kuan* of P'u-êrh and the Magistrate has the rank of *Erh-fu*.

There is also a Shan *Sawbwa* who lives in the new town and rules over the villages in the plain.

*Communications.*—Roads go north-west to Mien-ning, north to Ching-tung *via* Chén-yuan, south-east to P'u-êrh, south-west to Mêng-chu and west *via* Mêng-ka to Mêng-mêng.

[*Davies, 1895*].

WU-TING CHOU.—LAT.  $25^{\circ} 31'$ ; LONG.  $102^{\circ} 25'$ ; HEIGHT 6,000 feet.

The plain is about 3 miles long from north to south and 1 mile wide. It is watered by a stream 12 yards wide and  $1\frac{1}{2}$  feet deep which runs across it from west to east and flows down to Lu-ch'üan Hsien.

The town is somewhat irregular in shape, about  $1\frac{1}{2}$  miles in perimeter, and is built on the west side of the plain, on sloping ground at the foot of the hills. The wall is partly of stone, partly of brick, and is 20 feet high backed by an interior parapet 15 feet high and 6 feet thick. There are four gates. Inside the town are several *yamens* and temples and about 50 houses. Most of the population live in a suburb of 250 houses, outside the north-east corner and stretching along the east side.

The town is commanded from the hills to the east at ranges of 400 yards upwards.

*Supplies and transport.*—Supplies of ordinary kinds in small quantities are obtainable, and a certain number of mules and ponies could be procured.

*Government.*—Wu-ting is a Chih-li Chou or Independent Chou district, immediately under the *Tao-t'ai* of Yün-nan Fu. Under the Wu-ting official are Lu-ch'üan Hsien and Yuan-mou Hsien. [Davies, 1900.]

**YANG-KAI.**—LAT.  $25^{\circ} 26'$ ; LONG.  $103^{\circ} 3'$ ; HEIGHT 6,350 feet.

A village of about 120 houses in a plain between Hsün-tien Chou and Sung-ming Chou, in the district of Hsün-tien Chou.

The plain is about 8 miles long and averages  $1\frac{1}{2}$  miles in width. It is fairly well cultivated. A stream rises to the north of the plain and runs down it to the Sung-ming plain, where it turns east and joins the outlet of the Yang-lin Lake. It is crossed by the road from Yang-kai to Sung-ming by a bridge, the river here being 10 yards wide and unfordable with a gentle current.

*Communications.*—The main road to Yün-nan is *via* Yang-lin, but there is a shorter route *via* Sung-ming. [Davies, 1898.]

**YANG-PI.**—LAT.  $25^{\circ} 39'$ ; LONG.  $99^{\circ} 53'$ ; HEIGHT 5,150 feet.

A town lying west of Ta-li Fu, on the left bank of the Yang-pi Ho, in a valley about  $\frac{1}{2}$  mile wide, bounded by a high range of hills on the west and by the Ta-li mountains on the east. The town is in two bits, the upper town being about  $\frac{3}{4}$  mile above the lower. The former contains 100 houses, the latter about 300, and there is a large Panthay element in the population of the lower town.

The upper town is situated at the head of the bridge which crosses the Yang-pi Ho. It is built right on the bank of the river, which is here sheer and from 20 to 50 feet high, while on the land sides the town is surrounded by a mud wall 10 feet high and  $1\frac{1}{2}$  feet thick; this, however, has been allowed to fall into disrepair and is full of breaches.

The bridge is an iron chain suspension bridge 45 yards long and 6 or 7 feet wide, supported by eight chains. The river is 35 or 40 yards wide, has a strong current, and is too deep to be forded except in March and April, when it is fordable 300 to 400 yards below the upper town. The walls of the town command the bridge, but the town is commanded by the hills which rise up at once from the river on its right or western

bank. It is probable that there are also places above the town where the river could be forded in the hot weather.

The lower town is also built on the river-bank and is surrounded by a mud wall 12 feet high and  $1\frac{1}{2}$  feet thick, which has been allowed to get into disrepair. The hills to the east begin to rise close to the town, and command it at short range. It is also visible and commanded from the lower spurs of the hills to the west on the right bank of the river at distances from  $\frac{1}{2}$  mile to 1 mile.

*Government.*—The town is under a small civil official with the rank of *Hsien-chien*, who is subordinate to the *Hsien-kuan* of Yung-p'ing, who is under the *Fu-kuan* of Yung-ch'ang.

*Communications.*—From Yang-pi there is a road leading across the hills to Ta-li Fu without going round by Hsia-kuan. The road goes up the Yang-pi valley to the village of Mei-ti kai, 6 or 8 miles off, and from there ascends through Tien-t'o and descends into the Ta-li plain at the village of Hsi-chou, about 10 miles north of the town. The road is said to be passable in winter, but difficult if there is much snow.

It is practicable for animals, but not easy. It is never used by traders and would probably in point of time not be much shorter than the regular route by Ho-chiang-p'u and Hsia-kuan.

There is said to be a hilly road leading down the right bank of the Yang-pi Ho to Hsin-niu-kai ferry, which is on the road leading from Ta-li to Shun-ning. To the north-west a road goes off to Chien-ch'uan. [Davies, 1895.]

YAO-KUAN. —LAT.  $24^{\circ} 39'$ ; LONG.  $99^{\circ} 14'$ ; HEIGHT 6,150 feet.

The principal town in a district of the same name under Yung-ch'ang Fu.

The district lies on an extensive plateau to the south of Shih-tien, the plateau consisting of a series of shallow high lying valleys running one into another and bounded by undulations or low ridges, chiefly fir-clad, the valleys being well-watered and cultivated. As Yao-kuan is approached from the north, the valleys widen into a fine plain watered by the Yao-

kuan Ho, highly cultivated, and bordered on the eastern and western sides by numerous villages, some of considerable size.

*The town* is situated on slightly rising ground between two knolls at a point where the plain contracts, the stream flowing round the eastern flank of the town, which consists of one long main street running from north-east to south-west, with a fortified and loop-holed gateway at each end. It contains some 300 to 400 houses, including several substantial buildings, a triple courtyard temple and *Yamen* used as barracks. The southern end of the street is bordered on either side by shops of the usual Chinese type.

*Point of attack.*—The best point of attack would be from the high ground on the eastern and western flanks, whence the town is commanded. Should these be occupied by the enemy for defence, a turning movement to the west would probably be found necessary to reach still higher ground, whence the pagodas, which crown the knolls overlooking the town, could be shelled.

*Camps.*—Camp accommodation for a division could be found anywhere in the plain or along its borders. Small columns could camp (1) just outside and to the west of the town in the outskirts on grassy lanes and patches, and (2) round about the village of T'ien-hsiao-pa, which is situated to the south of the town. Small parties should put up in the temple or *Yamen*, as the neighbourhood is notorious for its thieves.

*Supplies.*—In the town supplies are considerable: grain, wheat and paddy, vegetables of many kinds, wheaten flour, *jaggery*, tobacco, etc., being procurable. In the shops the usual Chinese hardware goods, also Chinese shoes, paper, matches, etc. may be bought.

The plain itself could support a brigade in grain, while the large herds of cattle would supply meat.

*Transport.*—Each village in the plain possesses a certain number of pack ponies used for carrying firewood down to Shih-tien, where it is very scarce. Perhaps 250 to 300 could be procured.

*Inhabitants.*—The inhabitants of the town and most of the villagers are Chinese; but there are said to be a few Lisaws.

*Communications.*—The roads to Lung-ping cross the Salween at the P'an-chih-hua and Te-shêng-ying ferries. [Walker, 1899.]

YI-PANG—See Hsip-Sawng Panna.

YI-LIANG HSIEN.—LAT.  $24^{\circ} 57' N.$ ; LONG.  $103^{\circ} 7' E.$ ;  
HEIGHT 5,510 feet.

*The town.*—The town is situated in the plain of the Pei-ta Ho, one mile from the right bank of the stream, and is built on the extremity of a long narrow spur, rising 100 feet above the plain. The valley which has a width of three miles at this point, is largely under cultivation and runs from north to south being bounded on each side by bare hills rising to a height of 1,200 feet.

The town is oblong in shape, 650 yards, by 500 yards. It is surrounded by a crenelated wall of brick with a foundation of stone blocks. The wall is 20 feet high and 2 feet thick and is in good repair on the south and west faces, but contains several breaches on the north and east faces, the largest—40 yards long—being close to the north gate. The wall is backed on the inside by a parapet of earth 9 feet thick and 15 feet high, topped by a paved banquette. There is one tier of loop-holes in the wall, to admit of men firing when lying down. Each face is pierced in the centre by a gateway 4 yards wide, entrance being given through a bricked-in tunnel 20 yards long. The doors are double, of wood, 6 inches thick, with a thin plating of iron on the outside. At each corner of the west face are small caponiers of brick, pierced with 3 tiers of loop-holes. A stream 8 yards wide and 1 foot deep skirts the east face and a dry ditch 6 feet deep runs from the southwest corner to the west gate. Neither of these would present any obstacle. The interior of the town is thinly built over; paved streets connect each gateway, and at the central intersection is a small guard-house. The street running from the east to the west gate is lined with shops, but with the exception of a few *Yamens* and temples, the remaining houses are of a poor description. The south portion of the town, which is built on the extremity of the spur, rises about 80 feet above the rest of the town. The bazaar quarter lies 100 yards beyond the walls, skirting the north and east faces, and consists of narrow paved streets lined with shops of the usual pattern.

*Point of attack.*—The best line of advance would be over the cultivated plain to the north against the north face which is breached in several places. The suburbs on this face would also give cover right up to the walls. The spur to the south commands the town at short range, but the approach, along a narrow embankment, is a bad one. The town is also commanded by the heights one mile to the west.

*Government.*—The *Hsien-kuan* is under the *Fu-kuan* of Yün-nan *Fu*.

*Supplies.*—The town carries on a brisk trade, and supplies of paddy, beef, chickens and vegetables could be obtained in good quantities. Probably 500 mules are obtainable in the town and vicinity.

The Pei-ta Ho at this point is 82 yards wide,  $4\frac{1}{2}$  feet deep with gentle current, sandy bed and good approaches. On the A-mi Chou road, the stream is crossed at Chén-sao-tu, 2 miles south-east of the town by a trestle bridge of 20 spans, having a length of 95 yards and a 6-foot roadway, with a flooring of rounded timbers, covered with earth and straw. This bridge is of a temporary nature and would probably require renewing at the beginning of the dry season. At the crossing there are six boats of light draught, each capable of transporting 20 men with their kits.

*Communications.*—The town is situated at the junction of the main roads leading to Yün-nan *Fu* from A-mi Chou on the south, and Canton (*viâ* Huang-ts'ao-pa) on the east. Both these roads are in good condition and suitable for transport. [Fraser, 1900.]

**YI-MEN HSIEN.**—LAT.  $24^{\circ} 39'$  N.; LONG.  $102^{\circ} 12'$  E.; HEIGHT 5,525 feet.

*The town.*—The town is situated in the north-west corner of a paddy plain,  $2\frac{1}{2}$  miles by  $3\frac{1}{2}$  miles. The hills bounding the plain are generally about 400 feet high, for the most part bare and slope gently down to the plain. The town itself is built on a small knoll rising 20 feet above the plain. It is in the form of an irregular oval 550 yards long by 250. It is surrounded by a wall of sun-dried bricks with a foundation of stone blocks, 20 feet high and 2 feet thick, in bad repair, there being large breaches in several places. It is backed on the inside by a parapet of earth 15 feet high, with a banquette, paved in places

10 feet wide. There is no exterior ditch, but a small stream 5 yards wide skirts the west and north faces. Each quarter has its gateways, that on the south side being the most important, entrance on this side being given through a tunnel 20 yards long surmounted by a two-storied guard-house. The west gateway is screened by a brick wall, but the other entrances are merely closed by wooden folding doors of 6 inches thickness, thinly plated with iron on the outside. The interior of the town is very thinly built over, and contains no regular shops or streets and, beyond a few official residences and temples, the houses are of a very poor description. Outside the south face and at the foot of the knoll on which stands the walled town lies the bazaar quarter, consisting of a paved street 250 yards long containing shops of the usual pattern. The whole town and suburb contain about 450 houses.

*Point of attack.*—There are two roads by which troops could advance, one from the west (the San chia-ch'ang road) and the other from the east from An-ning Chou. The former enters the town from the south through the bazaar quarter, the latter at a point about 250 yards south of the south gateway. The only other approaches are mere bridle paths dividing the paddy fields. Advancing from the west it would be advisable to leave the main road  $2\frac{3}{4}$  miles before reaching the town, as the route then passes through a narrow thickly-wooded defile for  $1\frac{1}{2}$  miles before debouching on the plain. This could be avoided by striking north-east over the low downs bounding the north-west corner of the plain, which would form no obstacle to the advance. The town is commanded on the north and west at short range by the hills bounding the plain.

*Government.*—The *Hsien-kuan* is under the *Chou-kuan* of An-ning.

*Supplies.*—Vegetables can be obtained in fairly large quantities and other supplies of the usual kind in small quantities are procurable. Possibly 150 mules might be got in the neighbourhood.

There are two silver mines in the vicinity.

*Communications.*—The town lies off the main trade routes, and the roads leading to it are not good. [Fraser, 1900.]

**YI-WU.** —See *Hsip-Sawng Panna*.

YÜAN-CHIANG CHOU.—LAT.  $23^{\circ} 36'$ ; LONG.  $101^{\circ} 58'$ ;  
HEIGHT 1,490 feet.

Called Möng-chung by the Shans.

The plain is about 3 miles wide and is watered by the Yuan Ho which is shut in by hills rising 4,000 feet above the plain. The population is chiefly Shan; owing to its bad reputation for fever, the Chinese do not settle here in any numbers.

The Yuan river, which here flows into the right bank of the Red river is 80 yards wide and about 5 feet deep with gentle current. A ferry for goods and passengers exists at the town, and there is also a large ferry over the Red river.

The town is a wretched one, with an irregular collection of poor houses and one winding main street. The shops are small and poor and a good deal of the interior space within the walls is waste land.

*Government.*—The town is the residence of a *Chih-li-chou-kuan* who is subordinate to the *Tao-t'ai* of Lin-an. In the rains the official residence is moved to Ching-lung-chang.

The town is on the main road from Yün-nan Fu to P'u-êrh Fu. [Bourne, 1885.]

Intermediate office on the Yün-nan Fu, Ssü-mao T'ing telegraph line.

YÜN-CHOU.—LAT.  $24^{\circ} 27'$ ; LONG.  $100^{\circ} 4'$ ; HEIGHT 3,800 feet.

Called Möng-yu by the Shans.

A town under a *Chou-kuan* subordinate to the *Fu-kuan* of Shun-ning. It lies about 24 miles to the south-east of Shun-ning. It is situated between the Pei-ch'iao Ho which is the Shun-ning stream, and the Nan-ch'iao Ho, which, coming from the west, joins the former stream just below the town and runs northward into the Mekong. The town is built on the very end of a low spur which runs down between these two rivers and is slightly above the level of them. It is surrounded by a soft brick loopholed wall 12 feet high and 2 feet thick, which is not kept in very good repair, as from the Shun-ning side the town is entered without encountering any wall. There are 800 houses in the town and it is a rather larger and

more prosperous place than Shun-ning, the trade is, however, small and chiefly with Pang-tong, Mêng-sa, and other Chinese Shan States.

The valley of the Nan-ch'iao Ho in which the town stands is about  $\frac{1}{2}$  mile wide, with a few villages and a little cultivation. The height of the place is only 3,800 feet and the climate is consequently warm. The town is commanded from the hills on all sides at short ranges. Coming from Shun-ning the road passes through a short defile and comes suddenly on the town at a distance of about 100 yards. This would form a good position for defence, but it could be turned by climbing the hills to the south, which are easily accessible.

*The Pei-ch'iao Ho and Nan-ch'iao Ho.*—The Pei-ch'iao Ho is about 25 yards wide and 3 feet deep near its mouth, running with a strong current in a rocky bed.

The Nan-ch'iao Ho is from 30 to 40 yards wide in February and apparently about 4 feet deep with a strong stream running in a sandy and gravelly bed 70 yards wide. It is crossed on the road to Mien-ning by a bridge 70 yards long, made with a roadway of bamboos and earth supported on wooden posts. It is rather shaky, but will bear loaded animals.

*Supplies and transport.*—The usual supplies of beef, pork, ducks, chickens, straw, paddy, rice, vegetables and a little flour would be procurable, but the district is not a rich one and no large supplies could be counted on. There are a few merchants in the town, chiefly Panthays, and perhaps 200 mules would be obtainable.

*Government.*—The *Chou-kuan's* jurisdiction extends on the Shun-ning road as far as a gap through a spur called Kai-p'ai about  $2\frac{1}{2}$  miles from the town, the last village in this direction under Yün-Chou being Kung-fu-ssü. Southward about latitude  $24^{\circ} 15'$  a small stream divides it from Mien-ning, Shih-ming-k'an being the last Yün-Chou village on the Mien-ning road. The *T'ing-kuan* has the rank of *Erh-fu*.

*Communications.*—Roads go north-west to Shun-ning, south to Mien-ning, whilst east there are two roads to Ching-tung T'ing, one *via* Mêng-lang to Hsin-ts'un Ferry and thence *via* Pao-tien-kai, and another road through Mien-hua-ts'un to Feng-chu-lien crossing the Mekong at Wu-yin or Man-pieh ferries. [Davies, 1895.]

YÜN-NAN FU.—LAT.  $25^{\circ} 3' N.$ ; LONG.  $102^{\circ} 41' E.$ ;  
HEIGHT 6,370 feet.

Yün-nan Fu or Yün-nan Sen is the capital town of the province.

*Position.*—It is situated at the northern end of the Yün-nan Chien—a plain about 15 miles wide and 30 long—the centre of which is occupied by the Tien-ch'ih or Yün-nan Lake, also known as K'un Yang Hai, a sheet of water about 25 miles long from north to south by  $8\frac{1}{2}$  miles wide in the broadest part; it is connected with the town, which lies 3 miles to the north, by a navigable water-way, suitable for sailing vessels of light draught, and forming at its northern extremity a small harbour at the south-west gate of the city. In the dry weather, however, (March to May) only small boats can come up this canal. Sailing boats, even of light draught, can only get to within about 2 miles of the city.

*The town.*—The town is in the form of an irregular rectangle with its major axis pointing north-north-west. It has a maximum length of 2,140 yards, breadth 2,060 yards and a total perimeter of over  $4\frac{1}{4}$  miles.

*Wall.*—It is surrounded by a crenelated stone wall 50 feet high and  $2\frac{1}{2}$  feet thick, backed by an earth parapet 40 feet high, having an average width of 60 feet, except at the gateways where the thickness is 90 feet. The parapet is paved on the top with stone and along its inner edge runs a brick wall 10 feet high and 1 foot thick, the enclosed space being utilized as barracks, and dotted with small buildings holding on an average 20 men each. The front wall is flanked by numerous brick salients, loopholed in four to six tiers. These salients are practically open pits built out from the wall. There is no means of getting down into them from the walls, or of firing from the loopholes: ladders and staging would have to be constructed before they could be of use.

*Gates.*—The town is entered through bricked-in tunnels pierced in the parapet, the entrances being closed by folding doors of wood, 6 inches thick, with a thin exterior plating of iron. Each gate is protected by a three-sided traverse of stone walls 40 to 50 yards long, provided with a banquette and loopholes. Entrance to the traverse is generally through one of the side walls, which is closed by folding doors of wood, 4 inches

thick, with thin iron plates on the outside. There are two gates on each of the east and west faces of the town, and one each on the north and south faces surmounted by two-storied guard-houses.

*Ditch.*—From the north gate to the north-west gate runs a ditch 15 to 20 yards wide and (in February) 2 feet deep. The rest of the north and west faces is protected by a shallow dry ditch which would present no obstacle. From the south-east gate to the south gate runs a second ditch supplied with water from a stream skirting the east face of the town. This ditch has a breadth of 25 yards and a depth of 6 to 8 feet. The rest of the east and south faces is skirted by a marshy ditch which would prove a slight obstacle to escalade.

*Interior.*—The business quarter occupies the southern portion of the town and consists of badly paved and ill-lighted streets, generally about 15 yards wide, closely lined with wooden shops of the usual description. Outside the south gate is a suburb largely inhabited by the moving population, such as traders, owners of caravans, etc. In this suburb are situated the principal mule-inns and stables.

In the centre of the town, and at the northern extremity, two hills rise about 100 feet above the level of the town. On the central hill is a large magazine and the residences of several military officials, whilst on the northern eminence are several magazines and guard-houses as well as the "Examination Hall" the largest and most substantial building in the town. In the hollow between the two hills lies a stagnant marsh, the miasma from which contributes largely to the unhealthiness of the town. Adjoining the western edge of the marsh is the Arsenal, surrounded by a brick wall which encloses a spacious parade ground. The northern portion of the town is, generally speaking, thinly built over. Round each of the six gates clusters a suburb, of which the southern one before mentioned is by far the most important.

*Point of attack.*—The town stands at the northern end of the Yün-nan plain, where spurs run down to within 400 yards of the north face. Good artillery positions could be found on the grassy downs north-west of the town, whence the city could be shelled at a range of 1,500 yards from a plateau 350 feet above the town. The parapet would, however, be far beyond the penetrating power of mountain guns, the only

form of artillery it would be possible to transport in this country.

Like most Chinese walled towns, Yün-nan Fu could be taken by escalade without great difficulty. Timber for ladders could be obtained in abundance; moreover, the enormous *enceinte* to be defended, and the laxity and want of organization of the garrison, would contribute largely to its capture.

The best place for the main attack appears to be the north face of the town from the north gate eastwards. An attacking force might be formed up under cover behind the low range of downs north-west of the town, and advantage taken of a sunken road closely skirting the eastern portion of the north face, to mass the attackers previous to assault. Owing to the configuration of the ground, there is a large extent of "dead ground" at this point. The ground passed over between the hills and the town is, however, very irregular, owing to the large number of tombs scattered over the plain in this part.

The northern wall once gained, the attackers would possess a position practically commanding the town, whilst the Examination Hall would with little labour form an excellent keep against counter-attack. Several small magazines situated on the northern hill would also be necessarily captured. Feints should be made against the other faces—preferably, the west and south-west; an attack through the crowded suburbs to the south might lead to considerable loss of life in street-fighting.

An attacking force advancing from the Ta-li-fu road might be severely harrassed by a determined enemy in traversing the nine miles of valley down which the road runs from An-ning Chou to Pi-chih-kuan—a small village  $7\frac{1}{2}$  miles south-west by south of the town, where the road debouches on the plain. The slopes of the valley are steep and wooded and the line of advance rough and stony, but it is probable that the average Chinese Commander would prefer to await the enemy behind the walls of the capital, rather than risk a defeat and consequent pursuit in the open.

*European community.*—There is a British Consul General. The English colony at the capital consists of members of the China Inland Mission. Besides the French Consul and Assistant Consul, there are three medical officers of the Colo-

nial Service, an officer in charge of the Post Office, and about 6 officers connected with the railway. Many of the latter appear to come and go, or to be only temporarily in the capital.

There is in addition a Roman Catholic Bishop with a staff of about 8 priests.

*Supplies.*—Supplies can be obtained in large quantities.

The principal are rice, vegetables of various sorts, fruits, and beef, mutton, pork and fowls. Straw is largely used for forage, grass being obtainable in the dry season. Salt, tobacco and tea are also plentiful.

*Transport.*—Being one of the principal trading centres of Western China, transport animals could be obtained in large numbers. At ordinary times probably 2,500 mules could be got, and during the examinations, which are held annually in the ninth month and when an influx of about 10,000 people takes place, more than double the usual number of transport animals would be available.

*Telegraphs.*—Yün-nan Fu is the centre of the telegraph system of the province. One branch runs north-west to Ta-li Fu with offices *en route* at Ch'u-hsiung Fu and T'êng-yüeh connecting with the Burma State Telegraph at Bhamo.

Another branch runs north-east to Lu Chou on the Yang-tzê where it joins the main line to Peking. Offices are established *en route* in the province at Ch'ü-ching Fu, Chan-yi Chou, Hsüan-wei Chou, Wei-ning Chou and Pi-chieh Hsien, and from the last named a branch runs east having its terminus at Kuei-yang Fu. A third branch runs south to T'ung-hai, where the line bifurcates, one branch running south-west to Ssü-mao, having offices *en route* at Yüan-chiang Chou and P'u-êrh Fu, whilst the other turns south-east through the offices of Mêng-tzü, K'ai-hua Fu, Kuang-nan Fu, Kuei-chou, Po-gnai to Pai-sê, whence it descends the left bank of the Yu Chiang or West river *via* An-ning Chou to Canton.

From Mêng-tzü, communication is established with Tong-king *via* Lao-kai.

Reuter's telegrams are received daily.

*Roads.*—From the capital roads radiate in every direction. The principal ones are :—

				Miles.
To Ta-li Fu	227 miles and thence <i>viâ</i> T'êng-yüeh			
" to Bhamo	.. .. .. ..	507		
To Tung-ch'uan Fu	<i>viâ</i> Sung-ming Chou and thence to Sui-fu, 398 miles	.. ..	630	
To Chan-yi Chou	.. .. .. ..	94		
To Kuang-nan Fu	<i>viâ</i> Chu-yuan	.. ..	225	
To K'ai-hua Fu	<i>viâ</i> Mi-lê-hsien, Chu-yuan and P'u-tzu-t'ang	.. .. ..	182	
To Mêng tzu	<i>viâ</i> T'ung-hai	.. ..	147	
To Hui-li Chou	<i>viâ</i> Lung-kai Ferry	.. ..	165	
To Hung-mên-k'ou	ferry on the Yang-tzé	.. ..	158	
To Ch'ü-ching Fu	.. .. .. ..	86		
To Lu-liang Chou	.. .. .. ..	73		
To Huang-ts'ao-pa	in Kuei-chou	.. .. ..	144	
To Man-hao	.. .. .. ..	177		
To Wei-ning Chou	(and thence to Lu Chou on the Yang-tzé)	.. .. ..	201	
To Nan-an Chou	.. .. .. ..	95		
To P'u-êrh Fu	.. .. .. ..	250		

The Yün-nan plain itself is intersected with good firm cart roads. [Fraser, 1900; Murray, 1902.]

*Railways.*—Yün-nan Fu is now the terminus of the Tong-King Yün-nan Railway.

A description of the railway is to be found in the military report on Yün-nan.

YUNG-CH'ANG FU—LAT. 25° 7'; LONG. 99° 5'; HEIGHT 5,400 feet.

Called Wan-hsang by the Shans.

The town is situated in a plain running roughly north and south for 16 miles with an average width of 6 miles. The town is 5 or 6 miles from the northern end of the valley at the foot of the hills which bound it on the west.

*Town and fortifications.*—The town appears to have been originally nearly square, each side about 1,200 yards long built at the foot of a steep flat-topped knoll which runs out from the range of hills to the west. The town walls have, however, now been extended so as to include this knoll, so that the north and south faces are now about 2,200 yards long bending in towards each other and meeting in a sharp corner at the top of the knoll, so that the west face is very irregular in shape, whilst the east face is as it was originally 1,200 yards long. The wall averages about 20 feet in height and 1½ to 2 feet in thickness, though in size it is somewhat irregular. It is backed up on the inside by an earth parapet 15 feet high and thirty feet thick, so that the wall stands up 5 feet above the parapet, the latter forming a banquette. The wall has embrasures every 4 or 5 feet and is loopholed, though in some places the embrasures have been built up. There is no ditch. The wall is almost entirely of large, hard bricks, though in some places stone has been used. It is in good repair, and there are no low places in it.

*Gates.*—There are five gates in the city—two in the northern face, one in the eastern, and two in the southern. The eastern gate is in the middle, the main northern and one of the southern gates are about 600 yards from the north-east and south-east corners respectively. The other northern gate is 200 yards from the north-east corner and the other southern gate at the south-west corner just before where the wall rises on to the knoll. There has been a gate also in the middle of the west face, but it has been blocked up. All the gates, except the eastern and a south-western gate are defended by traverses 15 feet high with banquettes to them joined on to the main wall by side walls, with another gate through the side wall. The gateways are tunnels 25 yards long, closed on the outside by wooden doors 5 or 6 inches thick with thin iron plates on the outside. Of the inside of the city the flat part is about half built over, the rest consisting of gardens which are specially numerous inside the northern and eastern faces. On the lower slopes of the knoll which overlooks the town and is included in the walls are a number of temples, and there is a solitary temple on its flat top, but the greater part of it is too steep to be built over. The main street, where the greater part of the shops are, is that running from north

to south between the two main gates. The street and several of the side streets running out from it are crowded all day.

*Point of attack.*—The best place to attack the town from would be the hills which rise up to the west of it. There is a road which leads down to the town from this direction and which is said to come from Nawng-yang (Shang-chiang) on the Salween. From P'u-p'iao it would not be difficult to strike into this road on the western side of the range of hills. The hills as they descend towards the town are bare and open. The main range commands the knoll, which is included in the city walls at a distance of  $\frac{1}{2}$  mile from the western point of the town. From here there is a slight dip and a slight rise again to the wall on top of the knoll. The knoll once taken, the whole of the town is commanded. The knoll is thinly covered with small fir trees and is very steep. On top there is a considerable flat space, which would make a good camping ground, but there is no water actually on the knoll. It would have to be got on either side outside the city walls from a distance of about 500 yards.

*The Yung-ch'ang plain.*—The plain runs nearly north and south with a stream, which lower down becomes the Mêng-po-lo Ho flowing down the middle. It is full of villages and appears very prosperous and well cultivated. Two crops are grown in the year. After the rice crop is reaped the land is again ploughed up and sown with opium, wheat, beans, or gram (*kulthi*). The water with which the fields are irrigated is collected in reservoirs where the streams flow out at the foot of the hills.

*Supplies.*—Very large supplies are obtainable in the Yung-ch'ang plain. Beef, pigs, goats, geese, chickens, ducks, straw, rice, paddy, and flour, and vegetables of different kinds are procurable in large quantities. The following vegetables and fruits are sold in the market in January:—carrots, cabbages, radishes, green mustard, a sort of root somewhat resembling potato (called *Gooja* in Hindustani), oranges, very large pears (but very hard when eaten raw), pineapples, sugarcane, chillies. Little or no grass is to be got in January. The Yung-ch'ang plain would be the largest source of supply in Western Yün-nan.

*Transport.*—There are a great many pack-mules in the plain, probably amounting to at least 3,000. Bullocks are also used as pack-animals with the same saddles as mules.

*Trade.*—Yung-ch'ang is not such a large trading place as either T'êng-yüeh or Ta-li, but next to these two places and Ssü-mao it is probably the largest in Western Yün-nan. A good deal of trade is done with Bhamo, but also largely with the districts further south—the Shan States of Möng-cheng (Chén-k'ang), and Kêng-ma, the Panthay settlement of Pang-tong, and with Lung-ling. Panthays are fairly numerous in Yung-ch'ang, and several of the principal traders are Panthays.

*Government.*—Yung-ch'ang is a large district under a *Fu-kuan*, who is subordinate to the *Tao-t'ai* at Ta-li. The district includes T'êng-yüeh, Lung-ling and Yung-p'ing, and the Shan States of Möng-hitung (Wan-tien), Möng-cheng (Chén-k'ang), and Meng-ting are directly under Yung-ch'ang. There is a *Hsien-kuan* in Yung-ch'ang under the *Fu-kuan*. He is called the *Pao-shan Hsien-kuan*; Pao-shan being the name for the *Hsien* district of Yung-ch'ang.

*Communications.*—Yung-ch'ang Fu is on the main road from T'êng-yüeh to Ta-li Fu. There are also the following main roads leading from it—(1) northwards to Li-chiang and Tibet, (2) south-east to Shun-ning Fu and thence to P'u-êrh, (3) south to the Kun-long ferry, (4) south-west by the La-mêng ferry through Lung-ling to Nam-hkam, Theinni, or Bhamo. [Davies, 1896.]

Intermediate office on the Yün-nan Fu Bhamo telegraph line.

YUNG-PEI T'ING.—LAT.  $26^{\circ} 40'$ ; LONG.  $100^{\circ} 48'$ ; HEIGHT 7,300 feet.

The plain in which the town lies is 10 miles long and 4 miles broad at its widest point, with an area of 25 square miles. It contains some 20 villages with a population of about 12,000.

The town is surrounded by a wall 15 feet high, backed by an earthen parapet 10 feet thick. It is about 800 yards long from north to south by 600 yards wide. There is a gateway in each face. The four gateways are joined by paved streets, but the interior space generally is thinly built over. There is a large suburb on the north and north-east sides, containing probably 1,000 houses, and there are about 500 within the walls. The inhabitants are chiefly Chinese with about 150 Panthay families.

The town could best be attacked from a hill about  $\frac{1}{2}$  mile from the south-east corner, which completely commands it. The town is the residence of a *Chih-li-t'ing-kuan*, who is subordinate to the *Tao-t'ai* of Ta-li. In a big village on the east side of the plain resides a *T'u-ssu*, who has a certain amount of authority in the district over the non-Chinese inhabitants.

#### GAZETTEER OF RIVERS.

##### BLACK RIVER—

The Black river or Pa-pien Ho rises in about  $24^{\circ} 57'$  N. Lat.  $100^{\circ} 30'$  E. LONG. at a point some 50 miles S. S. E. of Ta-li Fu. It takes a general S. S. E. direction through the province of Yün-nan, joining the Red river in Tong-king just north of Hanoi. During the first part of its course through the province it appears to run through a cultivated plain 2 to 3 miles wide, bounded by low hills, whilst below  $24^{\circ}$  N. Lat. the valley gradually closes in, narrowing down to a small gorge bounded by hills about 600 feet high at first, and gradually increasing in height as the river approaches the frontier. The French at one time had hopes of opening up a trade-route with Yün-nan along the Black river, but it was found that the river was only navigable for a short distance from its mouth and the scheme was abandoned. The valley of the Black river has a very bad reputation for unhealthiness. Until early in the sixties the plain north of Lat.  $24^{\circ}$  was highly cultivated and well populated, as the remains of many villages and *Yamens* still testify, but it was devastated by a succession of terrible plagues and has consequently been nearly deserted. The inhabitants complain at the present day that the valley is unbearable in the rains, owing to the prevalence of fever.

##### *Bridges and Ferries.*

(a) Hsi-ma-kai. On the road from Yün-chou to Yün-nan Hsien, *viā* Man-hsing Ferry over the Mekong.

The river, which is here 12 yards wide and 1 foot deep, is crossed by a roofed-in wooden bridge in good condition.

(b) Lung-kai, 17 miles below Hsi-ma-kai, on the road from Ching-tung T'ing to Ta-li Fu and  $16\frac{1}{2}$  miles from the former.

The river is here fordable and about 20 yards wide. It is crossed by a wooden bridge with 2 spans of 10 yards each. Lung-kai has about 20 houses and a small inn. Supplies small.

In the plain near Ching-tung T'ing there are several temporary mule bridges, which would probably require renewing after the rainy season.

(c) Tsung-liang-kai on the road from Ching-tung T'ing to O-chia Hsien. Tsung-liang-kai is a small village on the right bank  $6\frac{1}{2}$  miles south of Ching-tung T'ing. Here the breadth of the stream is 48 yards, depth  $2\frac{1}{2}$  feet, with a current of about  $2\frac{3}{4}$  miles per hour. It runs in a bed of small stones, 80 yards wide, with good approaches to either bank. The plain, which is largely under paddy and sugar-cane cultivation, is about  $2\frac{1}{2}$  miles wide at this point.

The river is spanned at the village by a temporary trestle bridge 70 yards long with 4 feet roadway, and there are several other wooden bridges in the plain. One small boat is kept at the village and a few rafts and small boats are met with on the river in the vicinity of Ching-tung T'ing which are, however, merely used for the purpose of petty local trade.

There is extensive camp accommodation anywhere in the plain, but, beyond a little paddy, supplies would be difficult to obtain.

(d) Kuan-yi ferry. On the road from Ch'en-yüan T'ing to Hsin-p'ing Hsien. Lat.  $23^{\circ} 53'$  N. Long.  $101^{\circ} 6'$  E. Height 3,740 feet.

The road crosses the river at Kuan-yi ferry, one mile below the village of En-pa on the left bank, and 21 miles E. by N. of Ch'en-yüan T'ing. At this ferry the river is 30 yards wide, 12 feet deep, with muddy bottom and gentle<sup>7</sup> current [measurements taken in April]. The stream runs through a narrow gorge 135 yards wide, the hills sloping down to within 50 yards of the stream on either bank. The right bank is bounded by hills sloping up fairly easily from the stream for 1,000 yards, and then ascending steeply for a mile. On the left bank the river is skirted by a range of hills 600 feet high

There is no bridge at this point, but on the left bank is a small ferry-hut where are kept three dug-outs, two of 50 feet and one of 20 feet in length.

The approach to the right bank for the last half-mile is by a paved road 1 yard broad and rough in places, which descends the hill-side at a slope of  $\frac{1}{10}$ . The approach to the left bank from the village of En-pa, is by a narrow path which winds down the hill-side easily to the ferry.

Each bank is fringed by a strip of sand 50 yards wide, and 500 yards below the ferry there is camp accommodation on either bank for a brigade in a bend of the river, where the hills on each side recede for a short distance.

The nearest village to the right bank is Liang-chia-ying.  $3\frac{1}{4}$  miles distant, where there is accommodation for 500 men, and on the left bank, 1 mile distant, is En-pa where a brigade might be camped in the village paddy-fields. No supplies beyond a little paddy could be procured at either place.

The main road from P'u-êrh Fu to Ta-li Fu runs north through En-pa.

- (e) Hsin-fu. There is a ford here in the dry season and a ferry of two small boats in the rains on the road from P'u-êrh to Ta-li.
- (f) Man-lien, a small ferry.
- (g) Man-k'ang ferry about 7 miles above (i).
- (h) Nan-ma-tien ferry about 4 miles above (i).
- (i) T'ai-kung-ch'iao. A chain suspension bridge, 115 yards long by 5 yards wide. Near the village of Hsia-pa-pien on the road from P'u-êrh to T'a-lang.
- (j) Shao-p'ai ferry, 2 miles below (i).
- (k) Ma-li-chai ferry. One day below (i).
- (l) Ma-mu-kai ferry. Two days below (i).
- (m) Ku-ta-fan ferry. Marked on French maps. On the road from Möng-lieh to Lin-an.
- (n) Pa-leo ferry on the road from Mêng-li to Mêng-la.

CHIN-SHA CHIANG—See Yangtze.

CH'ING-HO—*See* Clear River,

CLEAR RIVER—

The Clear river or Ch'ing Ho rises near the village of Ya-la-chang in  $23^{\circ} 31'$  N. Lat.  $103^{\circ} 48'$  E. Long.

Taking a S.E. direction it follows the general line of the main road from Mêng-tzu to K'ai-hua Fu, crossing and re-crossing it five times *en-route*, running for the most part in a deep gorge bounded by sharp-pointed limestone crags. At 8 miles from K'ai-hua Fu the road crosses the river over a natural limestone bridge at T'ien-shêng-ch'iao, and the stream then debouches on the fertile plain surrounding K'ai-hua Fu and, after skirting the E. of the town, disappears 3 miles S. S. E. of the town into a high precipitous limestone cliff, and, emerging from its subterranean passage  $1\frac{1}{2}$  miles beyond, flows S.E. by S. past An-p'ing Hsien to the frontier of Tong-king. It finally flows into the Red river near Vietri. At K'ai-hua Fu the river has an average breadth of 36 yards and a depth of  $2\frac{3}{4}$  to  $3\frac{1}{4}$  feet, with moderate current, and firm banks 15 feet above stream. Several substantial stone bridges with 18 feet roadway span the river in the vicinity of the town and the stream can be crossed anywhere in the plain by hip-deep fords in the dry season. Height at the town, 4,350 feet. (Measurements taken in March).

HSI CHIANG.—

The Hsi Chiang or West river flows through Kuang-hsi in an easterly direction to Canton. Its two main branches in Yün-nan are the Hung-shui Chiang or Red Water river and the Yu Chiang or south branch (which see).

HSIA-KUAN HO.—

The Hsia-kuan Ho runs out of the south-west corner of the Ta-li lake, flows through the middle of the town of Hsia-kuan and runs in a westerly direction into the Yang-pi Ho. Where it passes through the town it is in two channels, the little island between them being fortified. Its main channel is here 40 yards wide and deep enough to be navigated by large boats, but  $\frac{3}{4}$  mile below the town at the entrance to the Hsia-kuan pass it falls over a deep waterfall and is here compressed into a width of 3 yards. Below this it is from 15 to 30 yards wide

and probably 2 to 4 feet deep, with a tremendous current covered with foam. Its current all down the pass is so strong that it would be impossible to ford it.

It is crossed by 3 bridges :—

- (1) In the town of Hsia-kuan, each channel crossed by a good stone bridge.
- (2) At Lien-ch'ang p'u a foot-bridge made of canes twisted together.
- (3) Eight and a half miles below the town a wooden bridge on stone piers 25 yards long. It is called the Ssu-shih-li or 40 *li* bridge, as it is 40 *li* from the town of Hsia-kuan.

The total course of the stream is about 14 miles.

HSIAO-HO-TI-HO.—*See* Nam-ti.

HSIN-CH'IAO-HO.—

The name by which the Nam-ti (which see) is known at T'êng.yüeh.

HUN-TING HO. *See* Nam-ting.

HUNG-SHUI CHIANG, or RED WATER RIVER—

This river is the central of three great branches forming the Hsi Chiang or West river, which flows into the China Sea at Canton.

The most northerly branch, the Ku-chou Chiang, which is the most important of the three, as having the greatest navigability, joins the Hung-shui Chiang at the town of Suan-chiang-k'ou in Kuang-hsi province, in Lat.  $23^{\circ} 55'$ , Long.  $109^{\circ} 3'$ .

The Red Water river rises in about Lat.  $25^{\circ} 55'$ , Long.  $104^{\circ} 5'$ , and flowing past Ping-yi Hsien, takes a southerly direction, till in Lat.  $25^{\circ} 15'$  about, it is crossed by the main road from Yun-nan Fu to Huang-ts'ao-pa at Chiang-ti. Here the river is 40 yards wide. It then turns east and crosses the Kuang-hsi border.

The river is not navigable in Yün-nan, the navigation limit being the town of Ch'ieh-chiang Hsien in Kuang-hsi.

LAN-TS'ANG CHIANG. *See* Mekong.

LU CHIANG. *See* Salween.

LUNG CHIANG. *See* Shwe-li.

LUNG-CH'UAN CHIANG.—*See* Shwe-li.

LUNG-PO RIVER.—

The Lung-po is a tributary of the Red river on its right bank and forms throughout its course the Tong-king-Yün-nan frontier. It rises in the Ch'in-shan chain and has a length of 21 miles; it is an exceedingly rocky stream, its width at its junction with the Red river does not exceed 50 yards. (*Authority*.—L'Avenir de Tonkin, 1892.)

MEKONG—

The Mekong or Cambodia river is called Lan-ts'ang Chiang or sometimes Ts'ang Chiang by the Chinese.

This is its usual name, but it is often locally called by the name of the nearest ferry. It is known to the Shans as the Nam-hkawng.

The river appears to rise in Tibet. During its course through Yün-nan its general characteristics seem to be the same everywhere. It runs in a very narrow valley with no level ground except in the bed of the river, shut in on both sides by hills, which rise very abruptly for 1,500 or 2,000 feet, and then slope more gradually back to the tops of the ranges. Its bed is sandy and full of large rocks; its general width is from 80 to 150 yards, its current strong with occasional rapids, and its depth probably very great.

*Bridges*.—There are three iron chain suspension bridges across the river:—

(a) The Fei-lung bridge on the road from T'êng-yüeh to Li-chiang, 15 miles west of Yün-lung Chou.

The bridge is an iron suspension one, 80 yards long, with a roadway of 12 feet. The river is here 100 yards wide with a deep fast current.

Fei-lung-ch'iao village on the right bank is walled, and contains 40 houses. The nearest village on the left bank is Ma-an-shan,  $2\frac{1}{2}$  miles from the river.

- (b) The Lan-ts'ang bridge on the road from Yung-ch'ang to Ta-li. The bridge is 65 yards long, supported by 12 iron chains, with a plank roadway 8 feet wide across it. At the bridge the river is 65 yards wide, but its general width is 80 to 100 yards, running with a fairly strong current and occasional rapids, over a rocky and sandy bed. Steep banks rise up from the river for 1,500 feet, up which zig-zagged paths have been cut.
- (c) Ch'in-lung-bridge on the road from Shun-ning to Ta-li. The bridge is 75 yards long with a plank roadway 6 feet wide, supported on 14 iron chains, which are fixed in brick piers on either bank. The river here runs in a deep chasm 40 or 50 feet below the level of the bridge. The hills on both sides are very steep and near the bridge are inaccessible except by the roads. The bridge is shaky and only one mule can cross at a time.

The following ferries cross the river:—

- (d) Chi-fan-tu ferry between the Fei-lung and Lan-ts'ang bridges. The river is crossed here by the direct road from Yung-ch'ang to Li-chiang, but as the road is difficult the Fei-lung route is often taken instead. The ferry is 20 miles south of the Fei-lung bridge.

There are said to be two or three other ferries between the two bridges.

- (e) Shên-chou ferry. On the main road from Yün-chou to Ta-li Fu, below the Ch'in-lung bridge. The bed of the river is 160 yards wide with 120 yards width of water in February. There are two boats at the ferry, each 24 feet by 6 feet, taking six mules each at a time.
- (f) Yang-kai ferry. A little used ferry on the road from Yün-chou to Yün-nan Hsien. The river is crossed just below the village of Pan-p'o. The river is 113 yards wide in January, with a bed 166 yards wide, very deep and with a strong current. Mules probably could not be swum across from the right bank as there is no proper landing place on the other side, the left bank being steep and rocky.

There are two punts at the ferry, 24 feet by 6 feet, holding six mules each. The village of Yang-kai is  $1\frac{1}{2}$  miles from the right bank. On the left bank the road goes north following the stream for  $\frac{3}{4}$  mile and then leaves it at Shén-shu where there is room for a small camp. The road then ascends steeply up a spur for four miles to the watershed.

There is a camping ground in fields on the right bank but none at the ferry on the left bank.

- (g) Man-hsing or Hsi-chiang ferry. Also called Wang-chia or Hsin-ts'un. A ferry on the road from Yün-chou to Ching-tung T'ing via A-lu-kai. The river is here 100 yards wide with a deep swift current. The ferry consists of two boats 30 feet long by four feet wide. Mules must be ferried across. The nearest village on the right bank is Ts'ang-pu-t'ang,  $2\frac{1}{2}$  miles from the ferry. The nearest on the left bank is Ping-chai. There are camping grounds on both banks.
- (h) Ka-chiu and Lao-chin-ch'ang ferries are very small and on no main road. They are said to be close together, about 1 march below (g).
- (i) Wu-yin ferry. Height 3,140 feet. This ferry is on the road from Yün-chou to Ching-tung T'ing. It is 40 miles east by south of Yün-chou. The river is here 110 yards wide, with strong current and of great depth. On the right bank is a strip of sand 80 yards long by 50 yards broad and on the left bank a strip of sand and shingle,  $\frac{1}{2}$  mile long by 90 yards broad. These would form standing room for small numbers of troops previous to embarking, but the rest of the banks on both sides are rocky, and slope down abruptly to the river. On the right bank the road ascends fairly easily up the hill-side for  $\frac{1}{2}$  mile by a mule track 8 feet wide, when the hills go back steeply for a mile to the village of Ma-ling. The ridge overlooking the right bank at the ferry is about 1,400 feet high. On the left bank the hills slope up steeply from the stream for nearly a mile and then run back fairly easily to the main range. The ridge overlooking the left bank is about 2,000 feet above the stream.

Two boats are kept at the ferry, each about 10 yards long with 5 feet beam. They are propelled by a bow and stern sweep and will take 10 mule loads a trip. Animals must be ferried over even in the dry season.

There is accommodation for about 200 men in the small village of Huan-cha-ts'un,  $\frac{1}{2}$  mile north of the ferry hut on the right bank. The nearest village to the ferry on this bank is Ma-ling on the ridge overlooking the stream  $1\frac{1}{2}$  miles distant, where there is accommodation for 500 men. Water, however, is scarce and supplies small. There are three small scattered hamlets,  $3\frac{1}{2}$  miles from the left bank, all bearing the name of Wu-yin. They would each accommodate about 150 men, and 300 could be camped at Lin-ts'un-hsin, seven miles east of the ferry. (Measurements taken in January).

- (j) Man-pieh or Man-chiu ferry. This is on an alternative route from Yün-chou to Ching-tung T'ing. Leaving the road to Wu-yin Ferry at Fêng-chu-lien,  $23\frac{1}{2}$  miles from Yün-chou, the road proceeds east-south-east *via* Kun-hai and Lo-pan-tung to the ferry, crossing the river about seven miles below Wu-yin ferry and rejoining the Wu-yin route just before reaching the village of Mén-ling-kai.
- (k) Man-lo ferry ; and
- (l) Sha-pa ferry are small ferries just below Man-pieh. They are not much used; the only caravans passing by this route appear to be traders taking salt from the brine wells at Nan-ch'iao, six miles north-west of Chên-yüan T'ing to Yün-chou.
- (m) Ka-li Ferry. This ferry is three stages east by north of Mien-ning T'ing and is also joined on the right bank by the road from Yün-chou to Wei-yüan T'ing. Overlooking the ferry on the right bank is the village of Chiang-pien and on the left bank Ka-li-kai, from which the ferry takes its name. From Ka-li-Kai a road goes east-north-east *via* Mêng-t'ang to Ching-tung T'ing and another road branches east by south from the ferry to Wei-yüan T'ing. One punt, holding 10 mules, available.

(n) Ma-t'ai ferry. Height 2,825 feet. This ferry is about eight miles below Ka-li ferry, and 19½ miles east-south-east of Mien-ning T'ing on the road from Mien-ning T'ing to Chén-yüan T'ing. At this point the river is 93 yards wide and of great depth. The current is very strong and it is impossible to swim animals across even in the dry season. The hills on the right bank immediately overlooking the ferry are about 450 feet high and the descent for the last 1,000 yards to the bank is by a good road, paved in places, which winds fairly easily down the hill-side to the ferry. On the left bank the hills overlooking the river at the ferry are about 550 feet high and thickly wooded with small firs. The road from the left bank skirts the stream in a northerly direction 2,000 yards, and then mounts the hillside by a rough stony road for 750 yards, after which it ascends fairly easily to the summit of the range at four miles. On the right bank a strip of sand 15 yards wide fringes the ferry, and in the basin formed by the hills at this point lies the village of Ma-t'ai-chang. This village is built on the slopes of the hill-side and contains one or two substantial buildings and a custom-house. On the left bank about 50 feet above the stream is a small strip of level ground 100 yards long by 15 yards broad, which might be used as a halting ground for a small number before embarkation. One boat of light draught, strongly built, of six feet beam is kept on the right bank. It is propelled by a crew of seven, with stern and bow sweep, and would hold nine mules at a time. Timber for rafts is plentiful on the left bank, and on the right bank, one mile south of the village.

There is accommodation for 2,000 men in the vicinity of Ma-t'ai-chang and camp for a battalion might be formed in paddy fields 500 yards south of the village in a bend of the stream. The supplies at the village are small. On the left bank there is no adequate camp accommodation, but a brigade could be encamped in a small valley at 6½ miles from the ferry, and there is camp accommodation for another brigade at Ta-lupien, 10 miles from the ferry. (Measurements taken in May).

(o) Ta-pêng or Man-pong. A fairly well-used ferry on the road from Mêng-mêng to Mêng-ka, and consequently on the route from Kun-Long to P'u-êrh via Kêng-ma. The river is here 100 yards wide with a strong current. There is one large boat holding 12 mules or 15 mule-loads or 30 men; one smaller boat holding 10 men. The ferry village is on the right bank. There is very little room to camp here, but more room could be found at the Shan village of Man-pong  $\frac{3}{4}$  mile below the ferry village. On the left bank there is no camping-ground.

(p) Ta-huan, called Ta-hawm or Ma-hawm by the Shans. On the road from Mao-mieh (Waw-myet) to Chêng-k'ang and Mêng-mêng. The river is here between 80 and 100 yards wide flowing in a sandy bed, with projecting rocks on each side. The current is strong, but, when the river is not in flood, mules can be swum across. There is one flat-bottomed boat 35 feet in length and seven feet broad, which is said to be capable of taking 20 mule-loads or 10 mules at a time. The approaches to either bank are steep, but when the river is not in flood there is ample room on either sandy shore to load any number of mules. There is no camping ground on either bank except for a few men in the sandy bed of the valley. A Chinese official of the Chêng-pien sub-prefecture is in charge of the ferry.

(q) Shuang-chiang, called Hsawng-sang by Shans. It is on the road from Möng-nyim to Mao-mieh and Mêng-ka. The ferry is about  $\frac{1}{2}$  mile below the junction of the Nan-hsung or Hsiao-hei chiang with the Mekong and to go north from the right bank the Nam-hsung has also to be crossed by ferry close to its mouth. The river is here about 80 yards wide with a strong current flowing in a rocky sandy-bed. There is one large flat-bottomed boat 35 feet long. The approaches to either bank are steep, but there is ample room on the sandy shore on either bank to load mules. The camping grounds on either bank are small.

(r) Su-mu-yên, a little used ferry on the road from Möng-nyim to Mêng-pan.

- (s) Mawk-lai. This is the Shan name; it is called Mo-nai by the Chinese. It is a well-used ferry and lies on the most direct road from Möng-nyim-nö to P'u-êrh and Ssü-mao.
- (t) Nan-pei, also called Ta-kan. This ferry is on the road from Chen-lawt to Mêng-chu and consequently on what is at present considered the main road between Kun-long and Ssü-mao or P'u-êrh. The river is here 100 yards wide with a strong current. One big boat taking six mules, or 12 mule-loads, or 20 men; one smaller boat taking eight men. Mules can be swum across in March, but not in the rains. No room for a large camp on either side of the river at the ferry. In the main village of Nan-pei, which is 1½ miles from the ferry, and 1,500 feet above it, on the right bank, camping room can be found. The ferrymen live at a small village close to the right bank.
- (u) Mêng-sa, a little-used ferry. The ferrymen live in the Shan village of Mêng-sa on the right bank.
- (v) La-sa. This ferry is on the most direct route from Chen-lawt to Ssü-mao. It is at present not much used, as the Chinese traders are afraid of the Lahus who inhabit part of the country through which the road passes. The ferry village is inhabited by Shans and is on the right bank.
- (w) Ssü-ch'i, a small ferry.
- (x) Ta-ya-k'ou or Nawng-sang. The latter is the Shan name; it is called No-cha by the Chinese. It is often spoken of as Ta-ya-k'ou because it is under the La-hu Chief of that place. The village of Ta-ya-k'ou does not lie on the river. This ferry is on the direct road from Möng-lem and Chén-pien to Ssü-mao.
- (y) Chiang-pien ferry. Breadth of river from bank to bank, 200 yards. Current rapid. There is one large clumsily-built boat here capable of transporting eight mule-loads.
- (z) Chén-k'ung.

At Keng-hung the river runs through a long plain. The ferry is composed of two long narrow boats lashed

together, with a bamboo platform on the top. A few small fishing boats are obtainable.

Below Keng-hung there is a ferry (Ta-lon) at Möng-ham.

One raft available taking 25 mules at a time. Standing room for 1,000 animals on either bank in the dry season.

MÖNG-LAI HO.—*See* Nam-ting.

MÖNG-TING HO.—*See* Nam-ting.

NAM-AN.—The Shan name for the Ta-ping, (which see).

NAM-HKAWNG.—*See* under Mekong.

NAM-HKO.—A tributary of the Salween on its right bank. It rises in about Latitude 24° 6'; longitude 98° 25'; in Loi-hsung, the Irrawaddy-Salween watershed, and flows into the Salween. From its source to where it absorbs the small stream the Nam-khai, below and to the east of the villages of Pang-tong and Man-hai (Möng-ko) (a distance of some 10 miles), it forms the Burma-China boundary.

NAM-HKONG.—*See* under Salween.

NAM-LONG.—This is a name sometimes given to the Ta-ping by Shans from Möng-na and San-ta.

NAM-MOW.—*See under* Shwe-li.

NAM-MU-AN.—The Shan name for the Ta-ping—*see* under Ta-ping.

NAM-PAUNG CHAUNG.—Called Nam-Pawng by the Shans and Nan-pang Ho by the Chinese. A tributary of the right bank of the Ta-ping. It is only important because it is at present recognised as the boundary between Burma and China. It is 30 yards wide in the lower part of its course, running with a swift current over a rocky bed, and is usually fordable.

## NAM-TI.—

The eastern and smaller branch of the Ta-ping river called by the Chinese T'ieh-shui Ho at T'êng-yüeh, Hsiao-ho-ti Ho at Hsiao-ho-ti and Nan-ti Ho in the lower part of its course. Nam-ti is its Shan name.

It rises in the hills to the north of T'êng-yüeh, flows along the north of the T'êng-yüeh plain, past the north-west face of the town, and thence through the Ho-shun-hsiang plain. From here it flows in a south-westerly direction down a narrow valley with occasional short gorges, through the Möng-ti or Nan-tien plain till it runs into the main western branch of the Ta-ping just below the new town of Möng-na. In the T'êng-yüeh plain it is about 25 yards wide and  $2\frac{1}{2}$  to 3 feet deep. Just below this it precipitates itself over a fall 60 feet deep into the Ho-shun-hsiang plain. Lower down it varies from 30 to 60 yards in width, and in the Möng-na plain it runs in a shallow bed nearly a mile wide, but with only 100 yards width of water in the cold weather.

*Bridges, fords and ferries.*—The Nam-ti is fordable for the greater part of the year, but there are many places where it runs through gorges and owing to increased depth and strength of current would be unfordable. In the Möng-ti plain it can generally be forded except after heavy rain. In the rains small rafts are used. In Möng-na it is fordable in the cold weather, but is crossed by raft in the rains.

It is bridged at the following points :—

1. Near west gate of T'êng-yüeh on the road to Hsi-lien. Two stone bridges, over the two branches in which the river here flows.
2. Just above the water-fall about 1 mile west of T'êng-yüeh on road to Mien-ch'in and San-si.
3. Two-arched stone bridge on road from Ho-shun-hsiang to Mien-ch'in.
4. Cheng-i-kuan bridge 3 miles from T'êng-yüeh on Möng-ti road. Stone bridge.
5. Kan-chih bridge 4 miles from T'êng-yüeh on Möng-ti road. Stone bridge. Height 4,700 feet.

6. Ho-k'ou or Hsin-chai. Iron chain suspension bridge on road from Möng-ti to new town of Möng-na. Bridge 23 yards long, 10 feet wide made of planks supported on 12 iron chains embedded in stone piers at each end. River runs in a gorge, and bridge is 40 feet above the water. Height 3,300 feet.

There are raft ferries in the rains at:—

1. Möng-ti (upper town) to Hsa-ko.
2. Möng-ti (lower town) to Man-pyek.
3. Na-hseng to Möng-na (new town).

No. 3 ferry is also kept up in the dry weather.

*Navigation.*—Owing to its small size and the gorges through which it passes, the Nam-ti is not navigated and there are no boats on it.

*Tributaries.*—The only important tributary of the Nam-ti is the Mien-ch'in Ho which joins its right bank at the village of Nang-yen about half-way between T'êng-yüeh and Möng-ti.

This tributary is as big or bigger than the main T'êng-yüeh branch.

#### NAM-TING.—

Called Möng-lai Ho or Hun-ting Ho or Mêng-ting Ho by the Chinese.

The main source of the Nam-ting rises about 20 miles south of the town of Mien-ning and at first flows northward past Mien-ning till after going for about 40 miles in this direction it turns right round just above the village of Mêng-lai and from there onward flows in a south-westerly direction past Möng-kyok (Mêng-chih), Mêng-chien, and Mêng-ting till it reaches the Salween just below the Kun-long ferry. Where it is crossed in the Mien-ning plain it is 30 yards wide and 3 or 4 feet deep, flowing over a sandy bottom with a moderately strong current. From the end of the Mien-ning plain down to Mêng-lai it is 20 or 30 yards wide, very rapid stream, running over a rocky bottom and from 2 to 4 feet deep. Where it is crossed at Mêng-lai it is said to be 4 or 5 feet deep in the dry season. From here on to Mêng-chien it is said to run between steep hills with a strong current.

At Mêng-chien it becomes comparatively a slow stream, falling only about 250 feet in the 50 miles between here and its mouth. Near Mêng-chien its channel is 300 yards wide with 80 yards breadth of water in April, and from here onwards it is from 80 to 200 yards wide with a moderate stream and is navigable for dug-outs and rafts. It would probably be navigable for larger boats if such existed. There is a road down its bank from Mêng-chien to Kun-long, but above the former place there is said to be no road on the bank, as precipitous hills come down to the water's edge on both sides in places. The road from Mêng-chien to Mêng-ch'ih does not follow the stream, but crosses hills.

*Bridges, ferries and fords.*—The river is crossed by two bridges close to the town of Mien-ning.

- (a) Mêng-lai. Here there is a ford, 39 yards wide and 2 feet deep in December. It is on the road from Yün-chou to Kun-long.
- (b) Man-tung. A ford. The river runs in two streams in December. One is 30 yards wide and  $1\frac{1}{2}$  feet deep, the other 40 yards wide and  $1\frac{1}{2}$  feet deep. Rapid current. It is on the main road from Mien-ning to Chen-k'ang (Möng-cheng). The village of Man-tung is 3 miles off on the right bank of the river, up the hill-side.
- (c) Möng-kyok (Mêng-chih). There is a ford here.
- (d) Möng-hka. There is a ford here, the river being 40 yards wide,  $2\frac{1}{2}$  feet deep with a slow current. It is probably a raft ferry in the rains. It lies on the road from Möng-yawng to Man-lai, a Chinese village in the hills on the right bank.
- (e) Chin-lao (Kyin-low). There is a ford here in the dry weather and a raft ferry in the rains. It is on the road from Mêng-sa to Chen-k'ang (Möng-cheng).
- (f) Nam-hpak. A ford here  $1\frac{1}{2}$  miles above Mêng-chien.
- (g) At Mêng-chien it is crossed by ferry (one small dug-out and deep ford).
- (h) Below Mêng-chien there is a ferry at Sum-nō.

- (i) In the Mêng-ting plain it is crossed by ferry at Ho-hkai Man-ten, and at Hpak-cheo; at the latter ferry the water is 100 yards wide and only 4 feet deep in March; at the ferry are two big and two very small dug-outs. The two big dug-outs when tied together will take six mule loads.
- (j) Hsop-hpawng ferry, just below the junction with the Nam-hpawng. The river is 80 yards wide with a strong current. Good approach on the right bank but steep on the left. There are 3 dug-outs at the ferry, the two largest lashed together will take 8 loads.
- (k) Man-ta-ho ferry. Opposite Man-hu village. The river is here 120 yards wide with a strong current. Two rafts are available each made of two dug-outs lashed together, and two single dug-outs. The approaches on both banks are good.

NAM-YANG.—The upper part of the Shwe-li is so called by the Shans.

#### RED RIVER—

The Red river or Song-koi river has, in addition, many local names during its course through Yün-nan. It rises in about  $25^{\circ} 30'$  latitude,  $100^{\circ} 12'$  E. longitude, some 20 miles south of Ta-li Fu where it is known as the Shih-yang Chiang. It takes a generally south-east course, passing Yüan-chiang Chou in  $23^{\circ} 38'$  N. latitude,  $102^{\circ} 12'$  E longitude, and Man-hao in  $23^{\circ}$  N. latitude  $103^{\circ} 27'$  E longitude; the river, some 25 miles below the latter town forming the boundary between Yün-nan and Tong-king and at Lao-kai, in  $22^{\circ} 25'$  N. Lat.  $104^{\circ}$  E. Long, the river passes altogether into French territory.

In its upper course in the Mêng-hua plain it is at a height of 6,000' but by the time it reaches Yüan-chiang, only 180 miles in a straight line from its source, it has fallen to 1,300'. In the lower parts of its course it is much lower than the surrounding country, and is consequently feverish. In the Mêng-hua plain it is 15 yards wide and  $1\frac{1}{2}$  feet deep in the dry weather, at Man-hao it is 100 yards wide and unfordable, at Lao-kai 200 yards wide, at Yen-bai (in Tong-king)  $\frac{1}{2}$  mile wide and at Haiphong  $\frac{1}{2}$  mile wide.

*Navigation.*—Small boats are said to navigate the river from Yüan-chiang to Man-hao, but large boats do not go above the latter place. Large boats 40 or 50 feet long and 10 feet wide with a carrying capacity of 4 or 5 tons navigate the river between Man-hao and Lao-kai. Below Lao-kai from the middle of May to the middle of December stern-wheel steamers drawing 2 feet can run and large cargo boats run all the year. Larger stern-wheelers drawing 6 feet run from Yen-bai to Vietri and still larger screw-steamers from Vietri to Hanoi, and Haiphong. The river is not navigable by night except between Hanoi and Haiphong.

The times taken are as follows:—

From Man-hao to Lao-kai ..  $1\frac{1}{2}$  days.  
 „ Lao-kai to Man-hao .. 4 to 10 days.  
 „ Lao-kai to Yen-bai .. 1 day.  
 by steamer from May to December,  
 by boat from December to  $2\frac{1}{2}$  days.  
 May.

From Yen-bai to Lao-kai,  
 by steamer from May to December,  $2\frac{1}{2}$  days.  
 by boat from December to 7 days.  
 May.

From Yen-bai to Hanoi ..  
 From Hanoi to Haiphong .. 12 hours.  
 From Haiphong to Hanoi .. about 15 hours.

*Bridges, fords and ferries—*

- (a) A bridge at the south end of the Meng-hua plain  $4\frac{1}{2}$  miles from the town. The stream is here 7 yards wide by 1 foot deep and flows in a stony bed 50 yards wide. It is crossed by a three-arch brick bridge 55 yards long and 15 feet wide. The bridge is crossed by the road from Ta-li to Yün-chou and Ching-tung T'ing.
- (b) Ford at Nan-chien on the road from Yün-chou to Yün-nan Hsien. The river is here 12 yards wide and 1 foot deep in January.

- (c) Ford on the road from Ch'ü-hsiung Fu to Ching-tung.
- (d) Mao-p'u-tzü ferry  $25^{\circ} 14'N$  latitude;  $101^{\circ} 33'E$ . longitude; height, 2315'. On the road from Ching-tung T'ing to Nan-an Chou (*via* O-chia Hsien). The ferry lies 14 miles east-north-east of O-chia Hsien. At this point the stream is 35 yards wide,  $2\frac{1}{2}$  feet deep, with moderate current and bed of small stones. It runs here between high hills which slope abruptly to the stream on either bank, the right approach being in addition loose and stony. On the right bank is a small ferry-hut and one boat, 7 yards long with 3 feet beam, is kept here, but is in bad repair. On either bank is a strip of sand 400 yards long by 35 yards broad, which would form a halting place for troops embarking. The nearest villages on the right bank are Ta-meit,  $5\frac{1}{2}$  miles distant, where there is camp for 500 men and Pei-yin-shan, 2 miles distant, where 450 men might be accommodated. There are no supplies in either village. On the left bank and  $1\frac{1}{2}$  miles distant from the river is Hao-p'u-tzü, where there is accommodation for a battalion, and a few supplies might be procured. The stream is fordable here in the dry season only. (Measurements taken in January).
- (e) Hsi-yang ferry on the road from Nan-an Chou to En-lo Hsien. There is said to be one ferry-boat kept here and the river is fordable in the dry season. It is one day's march below Mao-p'u-tzu ferry. The nearest villages are Chu-an-to on the right bank, and on the left bank Hsi-yang-chang which village works the ferry.
- (f) Ka-sa ferry, called Möng-hsai by the Shans.  $24^{\circ} 7'N$ . latitude,  $101^{\circ} 50'E$  longitude. On the road from Chén-yüan T'ing to Hsin-p'ing Hsien and 30 miles west of the latter town. At this point the river runs through a small plain,  $1\frac{1}{2}$  miles wide, largely under irrigation, and dotted with numerous Shan villages. On the left bank the hills run down steeply to the stream, whilst on the right bank they are  $\frac{3}{4}$  mile distant from the river, towards which they slope down easily, these lower slopes being under wet paddy cultivation. At the ferry the river is 38 yards wide,  $3\frac{1}{2}$  feet deep, with a current of about 2 miles an hour.

and flowing through a bed of fine sand. Three small boats are procurable on the right bank. On the left bank is a strip of fine sand, 353 yards wide and  $1\frac{1}{2}$  miles long, which would be suitable for a camp in the dry season, whilst a camp for a brigade could be formed anywhere on the right bank should the fields not be under irrigation. Poor supplies are obtainable from the numerous villages in the plain on the right bank, but a little paddy and a few head of cattle would be procurable. (Measurements taken in April).

- (g) Wo-tê, a small ferry, one day above Mo-sha.
- (h) Hsi-ni-ho, a small ferry, about 3 miles above Mo-sha.
- (i) Mo-sha ferry, also called Nan-tu. It is on the road from T'a-lang to Hsin-p'ing. The river is here 100 yards wide and 8 feet deep. There is one boat taking 12 mule-loads 3 mules or 20 men. The boat is 30 feet long and 4 feet wide. There are large camping grounds and food supplies on either bank. At the actual ferry the left bank commands the right, but  $\frac{1}{2}$  mile below both banks are the same height.
- (j) Nan-ka, a small ferry, three or four miles below Mo-sha.
- (k) Hsiao-lo-ma, a small ferry about 10 miles below Mo-sha.
- (l) Yüan-chiang. A big ferry on the road from P'u-êrh to Yün-nan Fu. The river is here 80 yards wide and five feet deep. There are numerous boats at the town of Yüan-chiang on the right bank.

Between Yüan-chiang and Man-hao the following ferries are marked on French maps:—

- (m) P'u-p'iao.
- (n) Yi-sa on the road from Mêng-li to Lin-an.
- (o) Wu-pang on the road from Möng-ton to Lin-an.
- (p) Man-hao ferry. The river is here about 80 yards wide and fairly deep. The current is not strong, and boats sail up with a fair breeze. The ferry boat carries 10 mule-loads or 15 men. There is standing ground on the right bank for about 50 animals, and 500 on the left bank. The left bank is commanded by the right bank, on which side the hills rise steeply.

RED WATER RIVER.—*See Hung-shui Chiang.*

**SALWEEN.—**

Called Lu Chiang by the Chinese and Nam-hkong by the Shans. Salween is a corruption of the Burmese name Than-win.

The river rises in Tibet and flows through Yün-nan in a generally southerly direction. Two days' march above the iron bridge on the T'êng-yüeh-Yung-ch'ang road it passes through the Shan State of Nawng-yang. The iron bridge is in Möng-hko territory, and there is a plain here 10 miles long and 2 miles broad. Below this the river again enters a narrow valley enclosed by steep hills and continues through this sort of country for the rest of its course through Yün-nan. About 50 miles below the bridge it is joined by the Mêng-po-lo Ho, which is the stream which comes from Yung-ch'ang. From here the river bends in a west-south-westerly direction, and enters Ko-kang territory 15 or 20 miles lower down. Its general width in this part of its course is from 100 to 180 yards; its current is strong with rapids in places and its depth is very great. Its bed is generally sandy with large projecting rocks. Its principal tributary is the Mêng-po-lo Ho, which runs into its left bank about latitude 24° 20'. Lower down in Burmese territory it receives the Nam-ting, also on its left bank.

It passes through the Lisaw states of Lu-k'u and Mao-tsao, the right bank being under the Mao-tsao *Sawbwa* and the left bank under the Lu-k'u *Sawbwa*, the district of Shang-chiang, and reaches the iron bridge, in the Shan State of Möng-hko (called Lu-chiang by the Chinese).

Above the Lu-k'u ferry it is said to be crossed only by rope bridges, to which men and animals are slung and pulled across.

**Ferries—**

- (a) Lu-k'u on the main road from Yün-lung westward.
- (b) Pi-li, raft ferry in Lu-k'u State.
- (c) K'ung-k'ao on borders of Shang-chiang and the Mao-tsao State; a raft ferry, not on any main road.
- (d) Li-ch'ai-pai in Shang-chiang, five or six miles above Mêng-ku, on the road from Kai-t'ou to Yün-lung.

- (e) Mêng-ku. On one of the roads from Kai-t'ou to Yung-ch'ang in the Shang-chiang district. River here 105 yards wide, in December in a sandy and rocky bed 150 yards wide. Rapid current, but mules can be swum across in December. Crossed by one large boat 30 feet long, 6 feet wide, rowed with two oars and steered with a beam 20 feet long. Will hold 8 or 10 mules, or 15 mule loads or 25 men. Large camping-grounds on left bank. On right bank place might be cleared 200 yards by 100 yards, and there is some level sand, 100 yards by 50 yards. Ferry-men live in Mêng-ku which is  $\frac{3}{4}$  mile off on the left bank. The right bank commands the left at the ferry.
- (f) Shui-ching. In Shang-chiang district, on one of the roads from Kai-t'ou to Yung-ch'ang, about 3 miles below Mêng-ku; road up hill towards Yung-ch'ang, said to be passable for animals, but bad.
- (g) K'ang-lang ferry, in the Shang-chiang district, on the road from T'êng-yüeh to Yün-lung Chou. One large punt is kept here, 20 feet long, carrying 10 mules or 20 loads at a time. The river is here 100 yards wide with a fast current. The valley for about 5 miles south of this ferry is almost a plain and it extends northwards apparently as far as Mêng-ku.
- (h) Möng-lai. In Shang-chiang district. On one of the roads from Kai-t'ou through Ta-t'ang-tzü to Yung-ch'ang.
- (i) Ta-sha-pa. In country directly under Yung-ch'ang. On road from Ch'ü-ch'ih through Ta-t'ang-tzü to Yung-ch'ang.

No information about ferries between this and the iron bridge.

- (j) Lu-chiang bridge in the Shan State of Möng-hko, called Lu-chiang by the Chinese. The river here is 100 yards wide with a rapid current. The bridge is in two spans, the western span is 50 yards long and the eastern span 70 yards long. The former crosses what is in January a shingly bed with a fordable stream

15 or 20 yards wide running down it: this bed is probably nearly dry in April and full of water in the rains. The latter crosses the main part of the river On each bank and in the middle where the two spans join are stone piers in which the 16 iron chains which form the bridge are embedded. The links of the chain are one foot long and  $\frac{1}{4}$  inch thick. The roadway is of planks fastened on to the chains and is about 10 feet wide. On the right bank the ground slopes very gently up to the foot of the hills two miles off. On the left bank the hills rise sheer above the bridge, so that the left bank commands the right at the bridge, though just below the bridge the two banks are about the same level. The road goes up the left bank from the bridge for about 200 yards very steeply and then turns along the foot of the hills, with a small plain on the right. There is also a path along the left bank and a little above the river, for 300 yards, then it zigzags and joins the other path about  $\frac{1}{4}$  mile from the bridge. It is an easier path for mules. This is at present the only bridge across the Salween in Yün-nan.

- (k) Ferry in the Lu-chiang plain on the road from Lung-ling to P'u-p'iao.
- (l) La-mêng or Hsi-shan ferry. A ferry on the Lung-ling-Yung-ch'ang Fu trade route. Originally an iron bridge was erected here, but it was swept away in 1894-95. The construction of a new one is under the consideration of the Lung-ling Sub-prefect.

At present the ferry consists of a single raft, which is capable of conveying eight mule-loads per trip, and which averages 7 minutes to cross from right bank to left, 12 minutes from left bank to right. It is reached on the right bank by a 2,560 feet descent in five miles from the Möng-hko circle of La-mêng, which gives its name to the ferry; on the left bank, by a 1,300 feet descent in three miles from the Lung-ling village of Ta-ping-tzü. The Salween at the ferry flows from north to south, taking a bend to the south-east, half-a-mile below the ferry. The river is about 120 yards wide, its current in the dry season at the ferry being easy. Animals are swum across without the least difficulty and with but little "drift" down stream. Be-

low the ferry and above the bend of the river a sand bank forms in the dry weather. This narrows the channel, and increases the rapidity of the current. The valley is deep, the hills on both sides rising from 7,000 to 8,000 feet above sea level, those on the right bank or to the west being possibly higher and certainly more bold than those on the east. To the north they diminish in height, falling away into the Lu-chiang-pa, into which from the ferry-house a route runs up the right bank.

In the case of troops crossing from east to west it is worth noting that there are two villages of T'ien-kang-i (not in view from the ferry) situated on a flattened spur and about two miles from the ferry-house on the right bank and at least a mile-and-a-half off the route. Here there is camp accommodation for a couple of battalions. There is said to be only enough water for 100 men, but it could be carried up from the river. These villages are backed by a low crest whence the Möng-hko plain or Lu-chiang-pa could be overlooked. Covering or flanking parties should in any case occupy these villages to cover the five-mile climb up to La-mêng.

*Camps.*—There is no camp accommodation at the ferry itself on the left bank while on the right bank a very small party only (not exceeding two or three tents) could find accommodation on high ground 200 feet above the river.

There are a few small fields lying in a sort of basin on this bank, a mile above the ferry, where, if dry, 300 men could find accommodation. They are not to be relied on in the cold weather, as they would most likely be under irrigation. It is usual to continue the march to Ta-ping-tzu.

*Standing room for troops.*—There is standing room on the right bank for a battalion; for half a battalion on the left bank. Not more than the latter number of men should be permitted to proceed to the ferry at a time.

(m) P'an-chih-hua ferry.  $24^{\circ} 38' N.$  Lat., Long.  $99^{\circ} 4'$ . Height 2,340 feet. This ferry is on the road from Lung-ling to Yao-kuan, 38 miles east by north of the former town. At the ferry the river is 120 yards wide, of great depth and with a strong current. It can, however, be swum by pack animals from December to May, though there is a certain amount of risk in the proceeding. The hills slope down precipitously to the

stream from a height of about 2,300 feet above it, leaving a small strip of sand 200 yards by 30 yards on the right bank, at the ferry, and one of 150 yards by 25 yards strewn with boulders on the left bank. One bamboo-raft is kept at a small ferry-hut on the right bank which is capable of carrying 5 mule loads at a time.

Camp at Chuan-shui, 1,900 feet above the ferry and  $1\frac{3}{4}$  miles distant, on the right bank, for 300 men and at Yu-tse Shan 4 miles distant for 500 men. On the left bank, camp for 350 men could be formed at Ma-lu-t'ang, 3 miles distant and 2,300 feet above the stream. No supplies obtainable. (Measurements taken in January.)

- (n) Tê-shêng-ying ferry about 5 miles below P'an-chih hua and three marches from Lung-ling on the road to Yao-kuan *via* Chuch-yeh-pa. It is said to be passable for animals, but the road from Lung-ling is rough and bad. It is also called Tuan-t'ou-ai ferry.
- (o) Ta-hei ferry 6 miles below Tuan-t'ou-ai, big ferry on main road from Lung-ling to Mêng-po-lo and other places.
- (p) Pêng-tung ferry 4 miles below Ta-hei, small raft ferry not on any main road.
- (q) Ho-wei ferry 3 miles below Pêng-tung, just above junction of Mêng-po-lo Ho. Small raft ferry, on main road.
- (r) Han-kuai ferry on the road from Möng-hkwan to Möng-cheng. The river is here 120 yards wide with a strong current. It is crossed by one boat taking 8 mule-loads or 20 men. Animals are swum across. The right bank is very steep and there is no room to camp nearer than  $\frac{1}{2}$  mile off. Room to camp could be cleared on the left bank, where the slope is more gradual. The ferrymen live at the Chinese village of Han-kuai, which is on the right bank 2 miles from the ferry and 1,850 feet above it.
- (s) Ch'i-tao Ho on the road from Chê-fang and Möng-hkwan (Mêng-shih) to Möng-hpawng, Möng-hom, and Möng-cheng (Chên-k'ang).

Going from Möng-hkwan to Möng-höm the roads seem about the same length whether the river is crossed at Han-kuai or at Ch'i-tao Ho.

At the Ch'i-tao Ho ferry the river is 100 yards wide with a moderate current. There is one boat at the ferry which can carry 10 mule-loads. Mules must swim across.

Good camping ground on the left bank.

The next ferry below Ch'i-tao-ho is said to be Têng-yang in Ko-kang territory. This and the ferries below will be found described in the "Gazetteer of Burma".

SHWE-LI.—

Called Lung Chiang or Lung-ch'uan Chiang by the Chinese.

The Shwe-li rises about latitude  $25^{\circ} 50'$  or  $26^{\circ}$  and flows southward through the districts of Ta-t'ang, Kai-t'ou, Watien, Ch'ü-ch'ih, and Lung-chiang, reaching Möng-yang lower down. From Kai-t'ou down to Lung-chiang it varies from 25 to 50 yards in width, has a rapid current and is in most places too deep to be easily fordable.

Its principal tributary in this part of its course is the Mo-lo Ho which runs down from Hsi-lien and joins the Shwe-li in Ch'ü-ch'ih district about latitude  $25^{\circ} 12'$ . When they join, the Mo-lo Ho is quite as big as the main river.

*Bridges, ferries and fords.*—In Ta-t'ang the river is said to be always fordable.

Below this are the following crossing places:—

- (a) Kai-ming bridge at Ch'iao in Kai-t'ou district. On the road from Mien-Kuang to Ch'iao-t'ou and Kai-t'ou there is a wooden mule bridge, partly supported by two iron chains on each side. It is 29 yards long and 6 feet wide.
- (b) Yeh-mao-ying bridge in Kai-t'ou district on road from Kai-t'ou to Hsi-lien and Mien-kuang. Wooden mule bridge, partly supported by two chains on each side 36 yards long, 6 feet wide.
- (c) Wooden foot bridge and deep ford in Kai-t'ou district near village of Shuang Ho,  $1\frac{1}{4}$  miles below the Yeh-mao-ying bridge. Not on any main road.

- (d) Kao-ch'iao bridge in Kai-t'ou district, near village of Kao-ch'iao which is on right bank. A wooden bridge on piles, passable for mules. Not on any main road.
- (e) Hu-tiao-shih bridge in Wa-tien district. A wooden foot bridge connecting the villages of Hsin-ta-kai and Chang-chia-ch'ang.

In the Wa-tien plain the river gets wider and shallower, and there are no bridges actually in the plain. The river is here fordable, but the fords are fairly deep.

- (f) Chia-hsiang-shih bridge at the south end of the Wa-tien plain in Wa-tien district. On the road from Wa-tien to Hsi-lien. A wooden mule bridge partly supported by two chains at each end, 27 yards long and 6 feet wide.
- (g) Ch'êng-tê bridge in Ch'ü-ch'ih district on road from Wa-tien through Ch'ü-ch'ih to T'êng-yüeh. Wooden mule bridge partly supported by two chains at each end, 32 yards long and 6 feet wide.
- (h) Yung-chi bridge in Ch'ü-ch'ih district on road from Ch'ü-ch'ih to Chiang-tso. Wooden mule bridge partly supported by two chains at each end, 32 yards long and 6 feet wide.

Below this there is said to be no bridge till the one on the T'êng-yueh Yung-ch'ang road is reached. But there is a raft ferry at Shih-chang-ling, one day's march below Ch'ü-ch'ih.

- (i) An iron bridge on the road from T'êng-yüeh to Yung-ch'ang. The river is here 40 yards wide with a rapid current and a rocky bottom. It runs between steep banks 100 feet high, except just at the bridge, where the left bank is low for 200 or 300 yards, and is commanded by the right bank. The bridge is an iron chain suspension one, 50 yards long with a plank roadway 8 feet wide.

Nearest villages on the right bank Kan-lan-chai, 2 miles from the bridge and Chiang-pô-t'ou close to the river. On the left bank the nearest villages are Tan-cha-p'o and Ta-li-shu  $\frac{1}{2}$  mile and  $1\frac{1}{2}$  miles from the river, respectively.

- (j) Lung-an-ch'iao bridge on one of the roads from T'êng-yüeh to Lung-ling.

- (k) Tung-tsung—a small ferry.
- (l) P'a-yin—a small ferry about 5 miles above Man-lo.
- (m) Near Man-lo an iron chain suspension bridge on the main route from T'êng-yüeh to Lung-ling T'ing. The old ferry has fallen into disuse since the bridge was made.

The river—which here forms the boundary between the Lung-ling and T'êng-yüeh districts,—is about 90 yards wide and flows with an easy current in the dry weather. There are two rafts available, which take four mule-loads each. Animals can be swum across.

There is camp accommodation on the left bank for a couple of battalions in disused fields. On the right bank extensive accommodation can be found near any of the villages on the Yeh-wu-tzü plateau which is only 500 feet above the ferry.

- (n) Hang-lung—a small ferry.
- (o) Man-tan—a small ferry.
- (p) Man-lin—a small ferry.

(q) Ti-yang or Möng-yang ferry in the plain of Möng-yang (Hsiao-lung-ch'uan). This is the ferry on the main road leading from Möng-hüm to Möng-chi. The river here has a sandy bed 135 yards wide, with a stream 65 yards wide and 5 feet deep in May, running with a moderate current. The left bank is steep and commands the right bank. At the ferry are small dug-outs, two of which tied together will take five mule-loads or about 12 men. Animals are easily swum across. The ferry men live at Ti-yang on the left bank of the river. Just below the ferry is a ford 3 feet deep in May. The river is said to be fordable in several places occasionally in April and May, but the fords cannot be depended on as a storm will often make them impassable.

- (r) Nawn-hseng,—A small ferry. Village is on the right bank.
- (s) Man-heng Ferry. LAT.  $24^{\circ} 28'$ , LONG.  $98^{\circ} 20'$ . This ferry is on the road from Man-waing or Ho-hsa to Lung-ling. At the ferry the stream is 85 yards wide with a depth of 5 to 6 feet near the banks, and is shal-

low (1 to 2 feet deep) in midstream, owing to the silting up of sand-banks. It has a moderate current, sandy bed and good approaches. In the dry season mules can be swum across without difficulty. Two dug-outs are kept on the right bank by Man-heng village. Each will transport 6 men with their kits. There is a camp for a division on either bank. (Measurements taken in January.)

*Boat ferries*—

In Chê-fang.	$\begin{cases} (t) & \text{Man-pying-Nawng-yang.} \\ (u) & \text{Nawng-hkam-Man-ten.} \\ (v) & \text{Hoh-kawng-Hwe-hawm.} \\ (w) & \text{La-le.} \end{cases}$
In Möng-mow.	$\begin{cases} (x) & \text{Ving-kyim.} \\ (y) & \text{Pang-pung.} \end{cases}$

Below Pang-pung the river splits up into two channels:—

	<i>Northern Channel.</i>	<i>Southern Channel.</i>
In Möng-mow.	$\begin{cases} (z) & \text{Sang-pi.} \\ (1) & \text{Nawng-ang.} \\ (2) & \text{Ta-ma.} \\ (3) & \text{Em-kyim.} \\ (4) & \text{Se-hseng-long.} \\ (5) & \text{Nawng-chem.} \end{cases}$	$\begin{cases} (6) & \text{Se-kow.} \\ (7) & \text{Nawng-hkam.} \\ (8) & \text{Tüng-long.} \\ (9) & \text{Nawng-mo.} \\ (10) & \text{Nawng-mon.} \\ (11) & \text{Kawng-hsawng, in Möng-mow.} \end{cases}$
		$\begin{cases} & \text{In Möng-mow.} \\ & \text{In Selan.} \end{cases}$
		(12) Nawng-hkwang, in Nam-hkam.

Below Nawng-hkwang the two channels re-unite.

In Nam-hkam	..	$\begin{cases} (13) & \text{Man-heo.} \\ (14) & \text{Ho-hsai.} \\ (15) & \text{Nawn-hkam.} \end{cases}$
In Möng-mow	..	(16) Kun-tat.
In Nam-hkam	..	$\begin{cases} (17) & \text{Nawng-kaw.} \\ (18) & \text{Kun-kyeng.} \end{cases}$
In Mo-meit	..	(19) Hsöp-kam.

*Navigation*.—The Shwe-li is navigated by small boats and rafts throughout the year between Man-pying in Chê-fang territory and Hsöp-kam below Nam-hkam. Above and below these two points it is not navigable owing to rapids. There are

two or three boats in most riverside villages in the navigable portion of the river, but the river is not much used as a means of communication. It twists about so much that it is quicker to go by land even down stream.

SIAO-HO-TI-HO.—*See* Nam-ti.

SIN-CH'IAO HO.—

The name by which the Nam-ti (which see) is known at T'êng-yüeh.

SONG-KOI.—*See* Red river.

TA-HO.—*See* Ta-ping.

TA-PING.—

Ta-ho is perhaps the official Chinese name, but it does not seem to be generally known by this name. It is usually called after the places it passes. It rises in the hills north of Tan-tsa (Chan-cha) probably about Latitude  $25^{\circ} 45'$ , and flows in a southerly direction among hills, passing across the end of the Chih-na plain, and through the San-si valley, till after again going through hills it emerges in the Möng-na-San-ta plain just above the capital of Möng-na. Here it receives an important tributary, the Nam-ti, and goes on through this plain for 25 miles and again passing through a defile for another 25 miles, comes out into the Irawaddy valley above Myothit and enters the Irrawaddy  $1\frac{1}{2}$  miles above Bhamo.

Between Tan-tsa and Chih-na it is 30 or 40 yards wide and fordable in the dry season. At San-si the Ta-ping is from 60 to 80 yards wide, with a gentle current and an average depth of about 5 feet in January. At this time of year it is fordable by waist-deep fords at Se-kow and at Nawng-mau, and the fords here no doubt get easier later on in the dry season. In the Möng-na San-ta plain it is a slow river running over a sandy bed from 300 yards to nearly half-a-mile in width, but not filled with water except after heavy rain. In the defile below this it is much narrower, and has a very strong current and considerable depth. Below Myothit it again becomes a slow, muddy river, 150 to 250 yards in width.

*Bridges, ferries, and fords.*—There are the following bridges across the Ta-ping.

1. Ta-ho, a Yawyin village on the left bank, on the road from Sa-don to Ku-yung. This is only a temporary foot bridge. The river here is forded by animals in the dry weather, but in the rains is impassable except for men on foot.
2. Myothit, called Möng-mäü by the Shans. A temporary wooden mule bridge is put up every year in the dry season, but it is always washed away in the rains.

The river is fordable at Tan-tsa and is fordable during the dry season at Ta-ho. In the Möng-na—San-ta plain it is fordable for men from January to June at many places, but they could not ford it without getting their loads wet.

There are boat ferries at the following places:—

In the San-si valley	<ol style="list-style-type: none"> <li>1. Sin-na or Chih-na-pa,</li> <li>2. Kuan-shang,</li> <li>3. Se-hkam.</li> <li>4. Hseng-hpa,</li> </ol>
In the Möng-na—San-ta plain.	<ol style="list-style-type: none"> <li>5. Man-nawng.</li> <li>6. Man-hkang-Ho-la.</li> <li>7. Na-ho-lem-Man-sang.</li> <li>8. Nam-noi-Nawng-him,</li> <li>9. Pa-chem-Nawng-sang,</li> <li>10. Ho-yin-Hang-pang.</li> <li>11. Man-hai-Pyin-gu.</li> <li>12. Na-pying-Pan-hseng.</li> <li>13. Chén-k'ang-Nawng-hsai.</li> <li>14. Man-waing-Hwe-kwi.</li> <li>15. Hang-kang-Nawng-hkang.</li> <li>16. Myothit.</li> </ol>

The river can be crossed by boat at any of the villages below Myothit.

2. Kuan-shang.—This ferry lies on the main road from Sa-don to T'êng-yüeh. The river is here 80 yards wide and 5 feet deep in January with a moderate current flowing over a sandy bottom. There are two large boats at the ferry, each holding 12 mule-loads. The ferrymen live on the right bank in the village of Kuan-shang. Large camping-grounds on either bank.

13. Nawng-hsai—This ferry is on the main road from Man-waing to Möng-na and T'êng-yüeh. The ferry is about  $\frac{1}{2}$  mile below Chén-k'ang. The bed of the river is here 480 yards wide, and in May there is a breadth of water of 240 yards and a depth of  $3\frac{1}{2}$  feet with a slow current. There are three boats each holding 7 mule loads. The ferry men live at Nawng-hsai, which is about  $\frac{1}{2}$  mile off the ferry on the left bank. Large camping-grounds on either bank.

Man-heo—This ferry is just below the last, and is also one of the main ferries on the road from Man-waing to Möng-na. The ferrymen live at Man-heo on the left bank.

14. Man-waing-Hwe-kwi—This ferry is on the road from Man-waing to La-hsa. The bed of the river is here 600 yards wide, with a breadth of water of 300 yards; sandy bottom and moderate current; steep bank 8 or 10 feet above water; six boats holding from 7 to 10 mule-loads each. In January mules had only to swim 40 yards, and the river is fordable here for men for three or four months in the dry weather. Large camping-grounds on either bank. Man-waing is close to the river; Hwe-kwi is about  $\frac{1}{2}$  mile off on left bank.

Naw-ku Ferry (called by the Kachins Ming-kawn Hka-kat).—Latitude  $24^{\circ} 22' 50''$ ; Longitude  $97^{\circ} 31' 40''$ ; elevation 400 feet;  $1\frac{1}{2}$  miles below the junction of the Nam-paung with the Ta-ping and on the route between Nam-paung and Loi-long *via* Man-tao. It is a crossing used only by Kachins. The river here is about 70 yards wide, and flows in the cold season with a comparatively easy current, rendering crossing a matter of no difficulty.

There are no boats, and it is crossed on five rafts each capable of carrying four loads and two men; the crossing averages 15 minutes per trip. Animals are swum across.

There is camp accommodation for 200 men and animals on both banks if cleared.

*Navigation.*—The Ta-ping is navigable for a short distance in two places, (1) from Möng-na to Man-waing, (2) from Myothit to its mouth.

In the first bit small boats and rafts are used, and some of the cotton imported into China is carried by boat between Man-waing and Möng-na, but there is not much trade carried on by

river. It takes two days to go up to Möng-na, and one day to come down to Man-waing.

Large boats can ascend to Myothit all the year round, and steam launches can go up in the rains. It takes a country boat one day to come down to Bhamo from Myothit and two or three days, according to the time of year, to go up.

In other parts of the river navigation is prevented by rocks and rapids, though probably in San-si the river might be navigated for short distances.

TA-YING HO.—*See* Nam-ti.

T'IEH-SHUI HO.—*See* Nam-ti.

TS'ANG CHIANG.—*See* Mekong.

WEST RIVER.—*See* Hsi Chiang.

YANG-PI HO.—

The Yang-pi Ho is said to rise in a large lake near the town of Chien-ch'uan Chou, about three days north-north-west of Yang-pi. It flows in a southerly and south-easterly direction past Yang-pi and continues in this course to the Hsin-niu-kai ferry, where it makes a sharp bend round to the north-east and goes in this direction towards the Mêng-hua plain. From here it bends round, again to the south, and it eventually enters the Mekong. Its principal tributaries are the Shun-pi Ho on the right bank and the Hsia-kuan Ho on the left. Where it passes Yang-pi it is 40 yards wide, with a very strong current and unfordable except in the driest weather about March and April. At the Hsin-niu-kai ferry it is 130 yards wide, unfordable at all times of year, with a moderate current flowing over a muddy bottom. Below this, where it enters steeper hills, it is narrower with a stronger current. Its height at Yang-pi is 5,300 feet and at Hsin-niu-kai 3,900 feet.

*Bridges and Ferries.*—It is crossed on the road from Yün-lung to Têng-ch'uan by a chain suspension bridge near the village of T'ieh-so-ch'iao. The bridge has a span of 40 yards with a roadway 6 feet wide. The river is here unfordable.

The river is crossed at Yang-pi by a suspension bridge 45 yards long supported by eight iron chains. Between Yang-pi

and Ho-chiang-p'u, there is a cane foot-bridge near the village of Chi-yi-pi, 9 miles from Yang-pi. On the Ta-li Fu—Shun-ning Fu road the river is crossed by a bamboo raft at Hsin-niu-kai. The raft will hold 10 mule-loads or four mules but mules can be easily swum across.

Between Yang-pi and Hsin-niu-kai there is said to be no crossing place but below Hsin-niu-kai are two ferries:—

- (1) Lu-cha-tu about 10 miles lower down.
- (2) Shih-cha-tu a few miles below Lu-cha-tu.

Neither of these are on any main road, but are used by villagers on the right bank in order to cross to Mêng-hua.

There is said to be a road up the right bank of the river from Hsin-niu-kai to Yang-pi, about six marches. The road is not level, but crosses several spurs.

#### YANG-TZE RIVER—

Called Chin-sha Chiang by the Chinese.

The Yang-tze river rises in Tibet and flows in a southerly direction past Ba-t'ang. From lat.  $29^{\circ} 15'$  to lat  $28^{\circ} 10'$  it forms the boundary between the provinces of Yün-nan and Ssü-ch'uan. In Lat.  $26^{\circ} 10'$  and Long.  $101^{\circ} 25'$  (approximately) it bends east and in about Long.  $101^{\circ} 50'$  forms the northern frontier between Ssü-ch'uan and Yün-nan. In about Long.  $102^{\circ} 30'$  it bends north-north-east and in Lat.  $28^{\circ} 50'$ , Long.  $103^{\circ} 55'$  (nearly) it again turns east and flows out of the province at An-pien in about Long.  $104^{\circ} 30'$ .

*Navigation.*—See Part I, "Communications by water."

*Bridges, ferries and fords.*—The following are the crossing place known in Yün-nan territory:—

- (a) Mo-ting. A rope bridge  $6\frac{1}{2}$  days above (d).
- (b) So-tsung. A rope bridge  $3\frac{1}{2}$  days above (d).
- (c) Kuan-yo. A rope bridge  $1\frac{1}{2}$  days above (d).
- (d) Pang-tzü-la ferry. On the road from A-tun-tzü to Chung-tien. The river is here 100 yards wide and deep, with a moderate current. One big boat is available, 50 feet long with pointed bow and 5 feet wide at the stern, it is flat bottomed and will take 8 mules with their loads at a time.

No village near the left bank. On the right bank  $\frac{1}{2}$  mile from the ferry is Pang-tzü-la, consisting of 100 scattered houses. It is the residence of a *T'u-ssu*. Fair supplies of rice are obtainable and there is camping ground in the village fields.

- (e) Do-tung, a small ferry for foot passengers.
- (f) Ch'i-tsung. On the direct road from Chung-tien to Wei-hsi T'ing.
- (g) Kê-lu-wan. On the main road from Chung-tien to Wei-hsi T'ing.
- (h) A-hsi ferry on the road from Li-chiang Fu to Chung-tien.
- (i) Ssü-li-ch'ang-ch'iao. An iron bridge on the road from Li-chiang Fu to Yung-pei T'ing. The river is here 80 yards wide. It is crossed by an iron chain bridge 110 yards long and 50 feet above stream. The roadway of planking is in bad repair, and only one mule can cross at a time. There are no boats at this point. The approaches to the river are steep and rocky. Camp at Tui-nao-k'o, 4 miles from the right bank, for a small force. Few supplies. Camp at Kuan-yi-lang, 6 miles from the river on the left bank. Small supplies but plenty of camp accommodation.
- (j) To-mei ferry. One boat holding three mules and two smaller boats. Small camp on right bank at To-mei, and on left bank large camp at Ta-p'ing-ts'un.
- (k) Hsin-ch'êng ferry on the road from Têng-ch'u'an Chou to Yung-pei T'ing. Nearest villages Hsin-ch'êng on the right bank and Chin-chiang-kai on the left.
- (l) Chiu-ta-kou ferry.
- (m) Hsin-chuang ferry on the road from Hsin-chuang to Ta-yao Hsien. The river is here 120 yards wide with a strong current. There is a rapid just above the crossing but none below. There are two boats at the ferry each taking 6 mule loads at a time. The approaches to the river are steep.

Camp on the right bank at Jen-ho-kai, 5 miles from the ferry. The village consists of 100 houses, closely packed together

and a fair inn. Small supplies. Camp on the left bank at Hsin-chuang, a village of 30 houses with one dirty inn. Small supplies. There is room to camp on the bare slopes.

(n) Hung-pu-so ferry. On the road from Pin-ch'uan Chou to Hui-li Chou. The river is here from 140 to 180 yards wide. The right bank slopes gradually down to the water's edge and is covered with boulders, the left bank is steeper. The current is about 6 miles per hour. There are two flat-bottomed boats at the ferry, 30 feet long and 7 feet wide with a draught of  $2\frac{1}{2}$  feet. Each boat carries 15 mule-loads or 10 mules or 33 men. There are also several small boats at the ferry. No camping-grounds on either bank

(o) Nga-chih-lu ferry.

(p) La-cha ferry.

(q) Lung-kai ferry. On the road from Yün-nan Fu to Hui-li Chou. The river is here 400 yards wide with rapid current. There is one boat 45 feet long, width  $9\frac{1}{2}$  feet, carrying 18 mules or 60 men, also several small boats. There are very small supplies and camping grounds at Lung-kai,  $\frac{3}{4}$  mile from the right bank.

(r) Mo-i-cha ferry.

(s) Pai-ma-k'ou ferry.

(t) Lu-ch'ê.

(u) Chih-i.

(v) Mêng-ku (not to be confused with Mêng ku (cc) which is near Ch'iao-chia)

(w) Hung-mên-k'ou ferry. On the road from San-ying-p'an to Hui-li Chou. The river is 150 yards wide with a strong current. It is crossed by two boats each 30 feet long by 5 feet wide taking 5 mules, 6 mule-loads or 12 men.

The best camping ground is on the left bank, just below the ferry.

(x) Pai-t'an ferry.

(y) Chin-p'ing-tzü ferry.

- (z) Huang-ts'ao-ping ferry.
- (aa) Mo-lu ferry.
- (bb) Mien-sha-wan ferry.
- (cc) Mêng-ku. A big ferry on the road from Tung-ch'uan Fu to Hui-li Chou.
- (dd) Ch'iao-chia T'ing. On the road from Ch'iao-chia T'ing to Hui-li. The river is here 150 yards wide and deep with a fast current, running in a bed 250 yards wide between low banks. There are six boats at the ferry, but only one will take mules. This boat will hold 7 mules or 12 loads. The smaller boats will take 6 loads at a time. The town of Ch'iao-chia T'ing is 2 miles from the right bank. On the left bank is the village of Wa-wu which contains 200 houses.

There is a camp at T'ang-kuan-yao, 7 miles from the left bank. Camp can be found in fields in a small cultivated valley. Small supplies.

Of the ferries above quoted only (d) (i) (k) (l) (m) (n) (q) (w) (cc) and (dd) are considered of importance. Many of the others have no mule-roads leading to them.

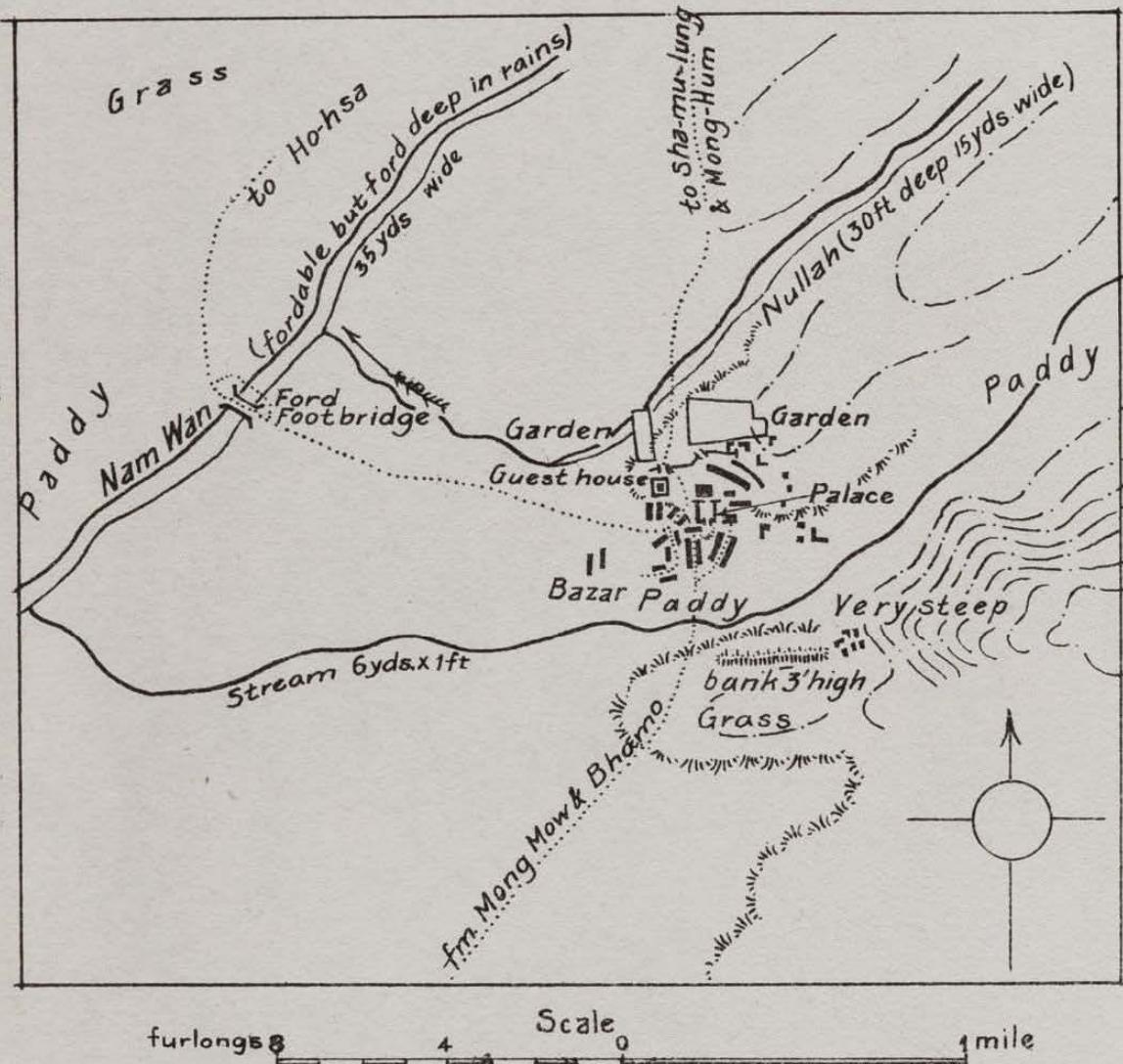
Below Ch'iao-chia T'ing the river is crossed at Fu-kuan and P'ing-shan Hsién. Below P'ing-shan it is navigable for native boats.

#### YU CHIANG.

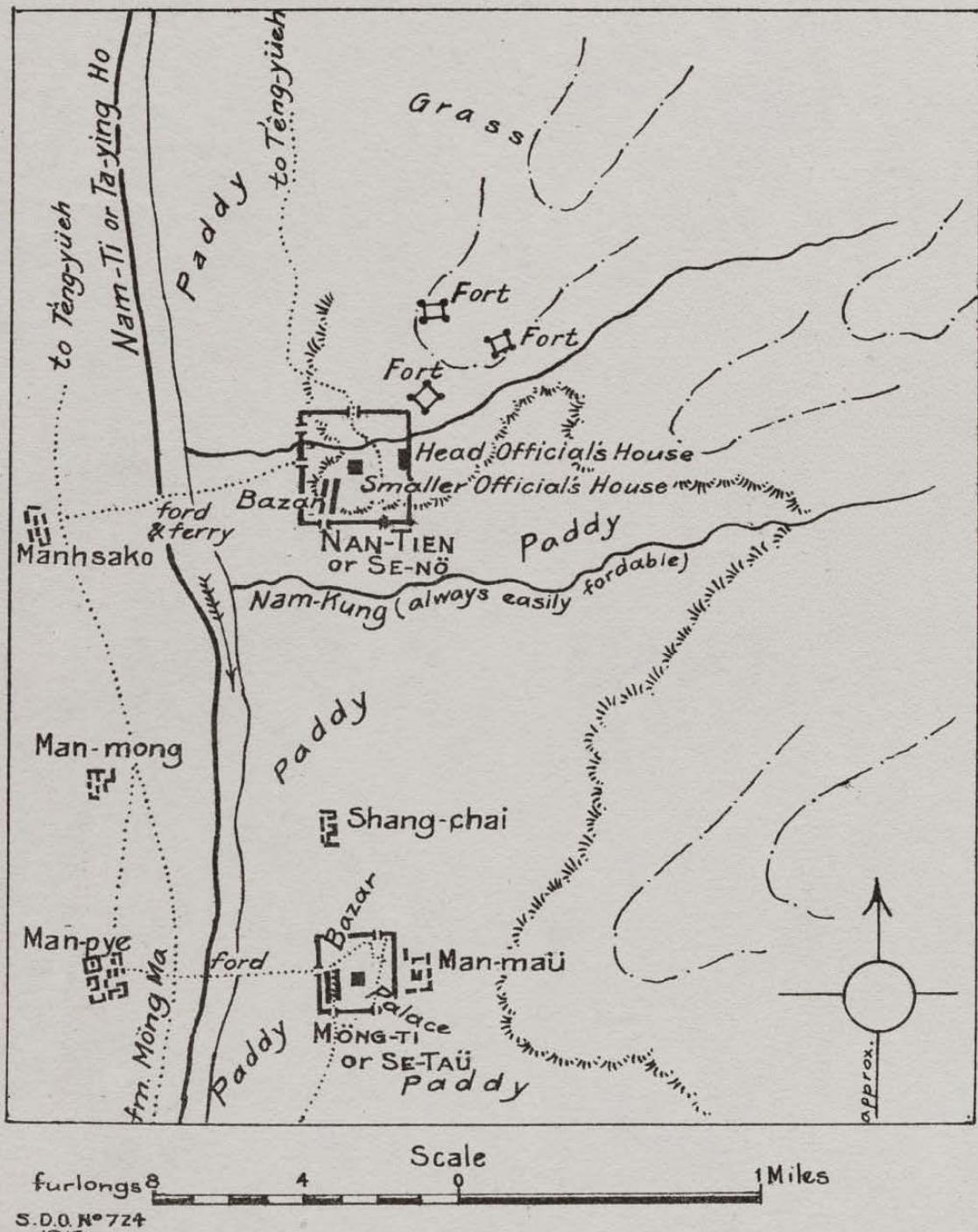
The southern branch of the Hsi Chiang or West river.

It rises in about Lat.  $24^{\circ} 30'$ , Long.  $104^{\circ} 40'$  and flows in easterly direction; it is not navigable in Yün-nan, the navigation limit being Pai-ai on the Kuang-hsi border. Its principal tributary in Yün-nan is the Fa-pei or Hsi-yang Ho.

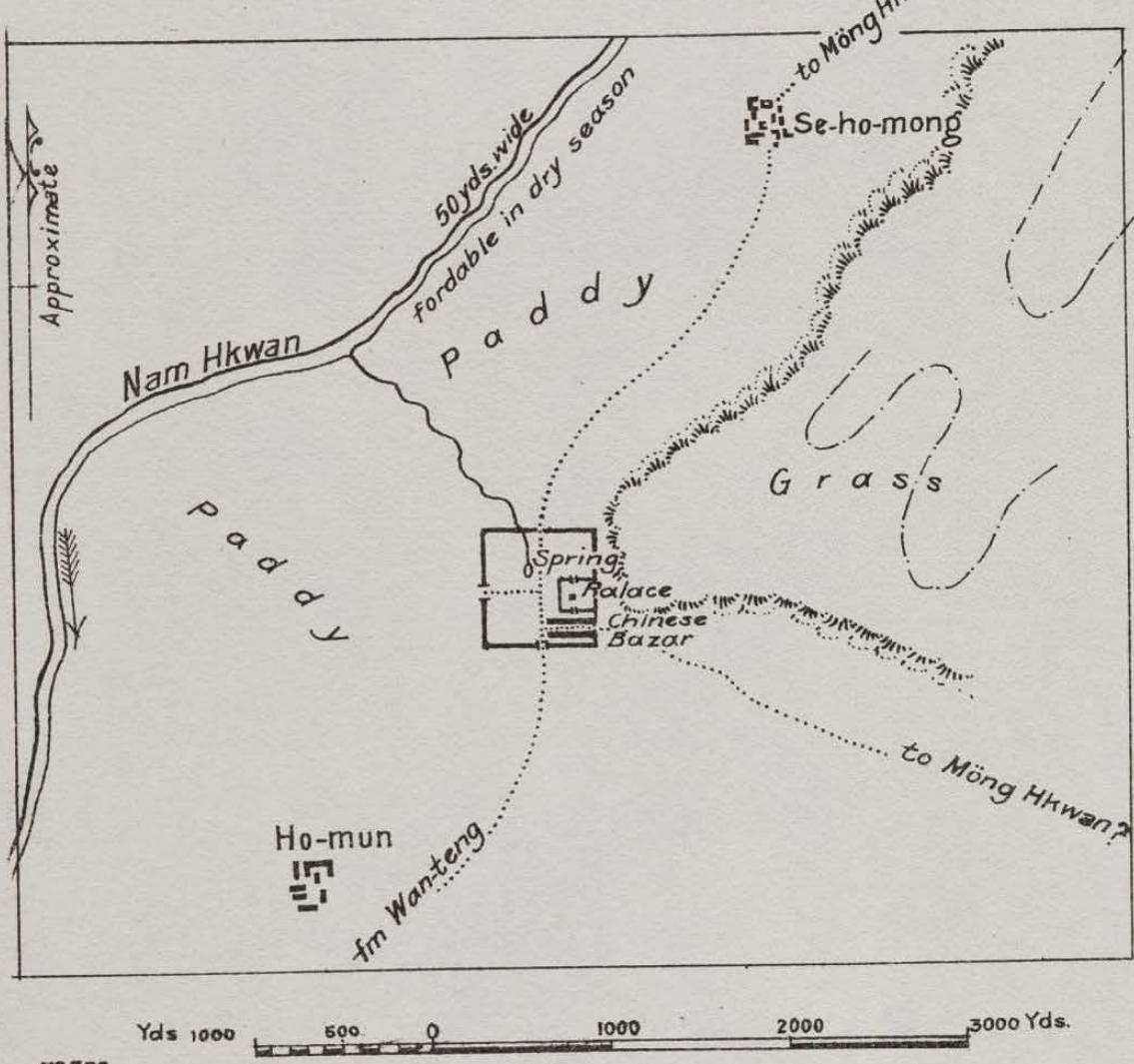
EYE SKETCH  
of  
MONG WAN  
(LUNG-CH'UAN)  
by Captain H. R. Davies.



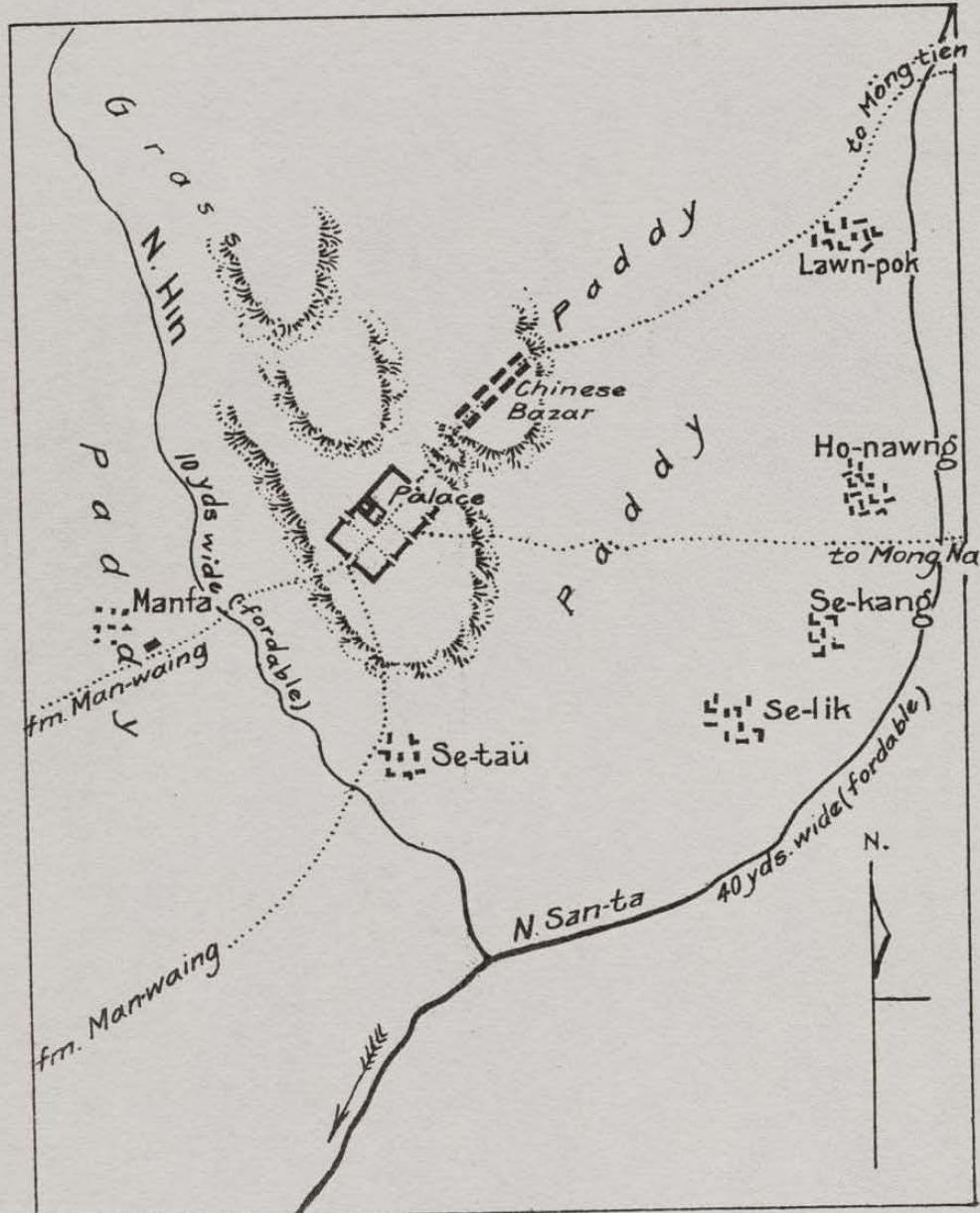
PLAN OF  
MÖNG TI AND NAN-TIEN  
by Captain H. R. Davies.  
From Native information.



PLAN OF  
SE-FANG  
(CHÊ-FANG)  
by Captain H. R. Davies.  
From Native information,



PLAN OF  
SAN-TA  
(CHAN-TA)  
by Captain H. R. Davies.  
From Native information,

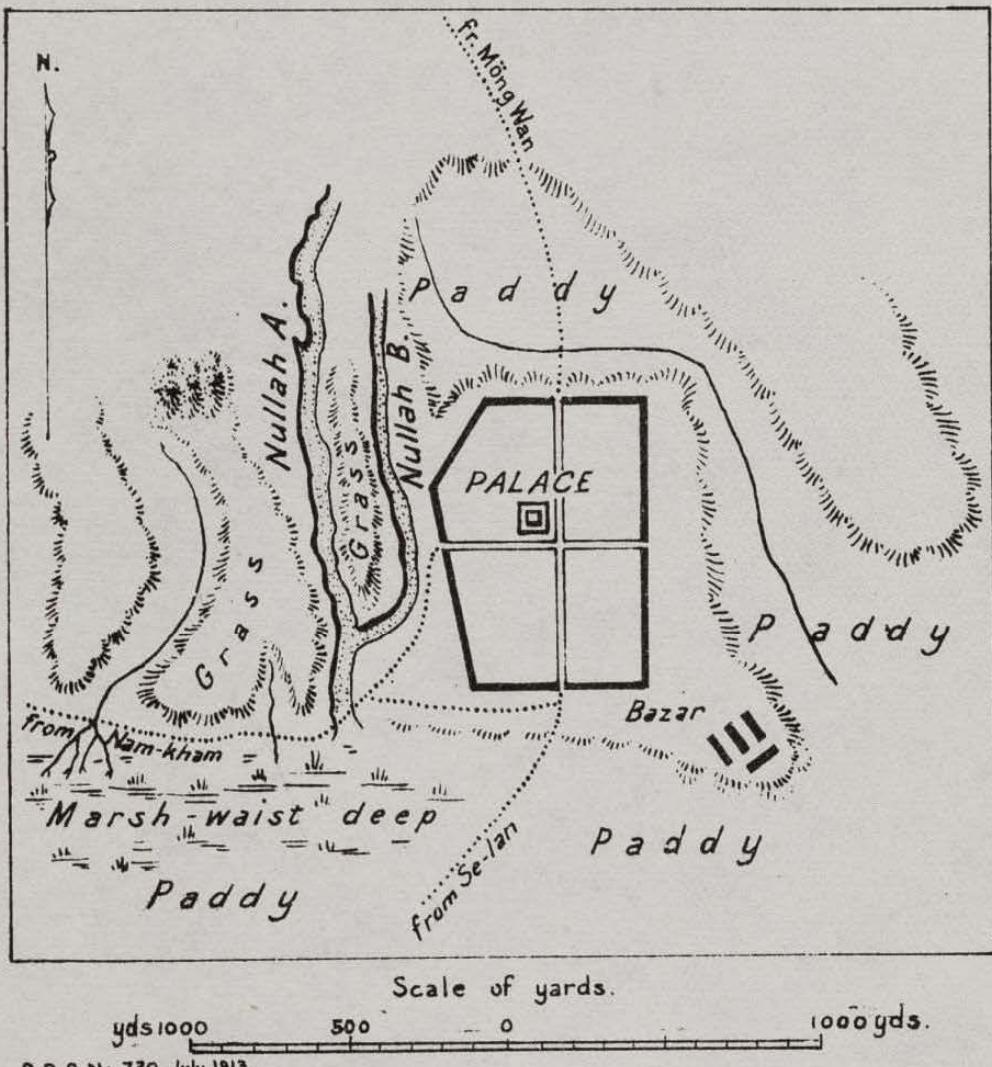


Scale 1 inch = 1 Mile

Yds 1000 800 0 1000 2000 3000 Yds.

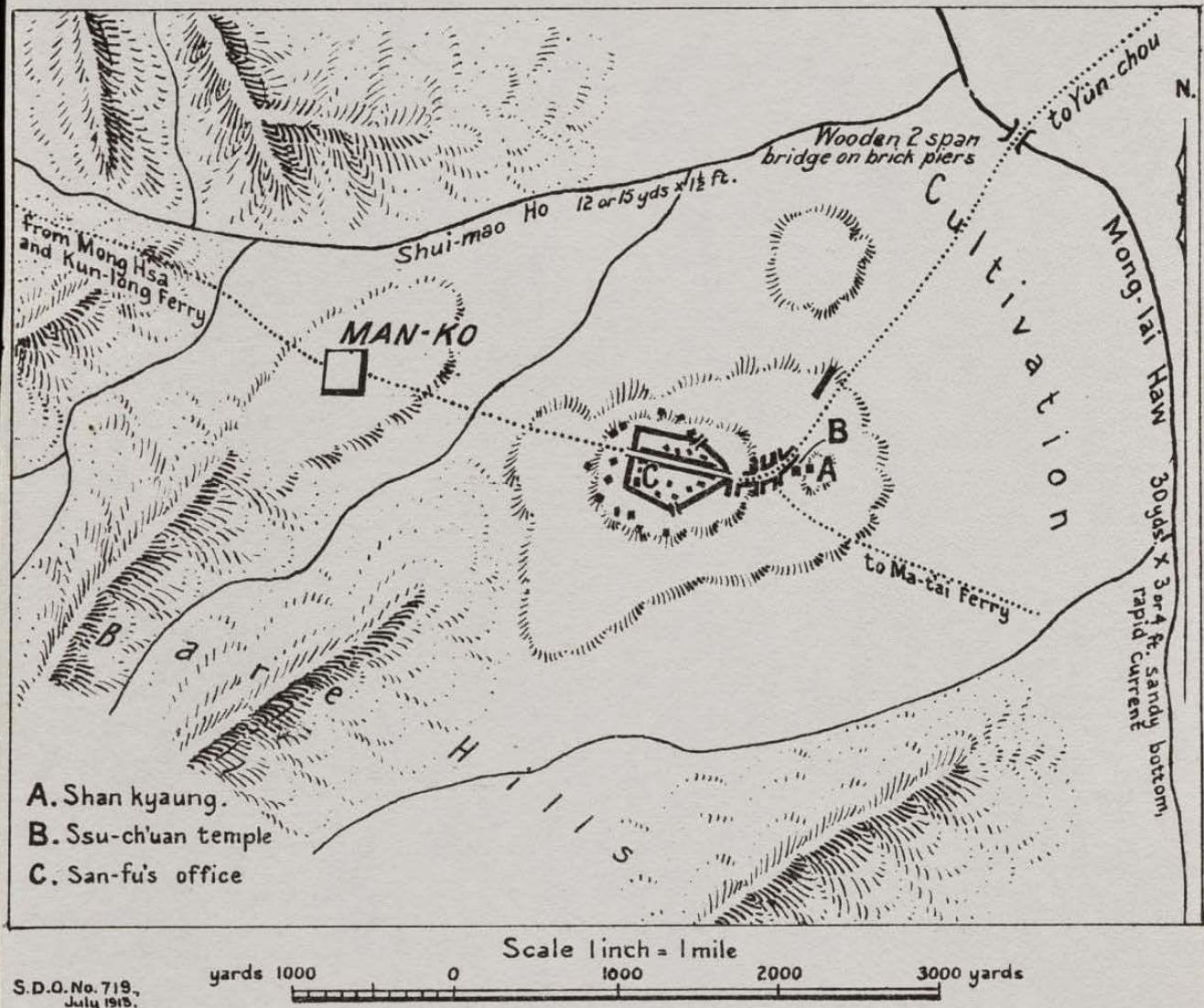
S.D.O. No. 721  
1913

EYE SKETCH  
of  
**MONG-MOW**  
(MÈNG-MAO)  
by Captain H. R. Davies.

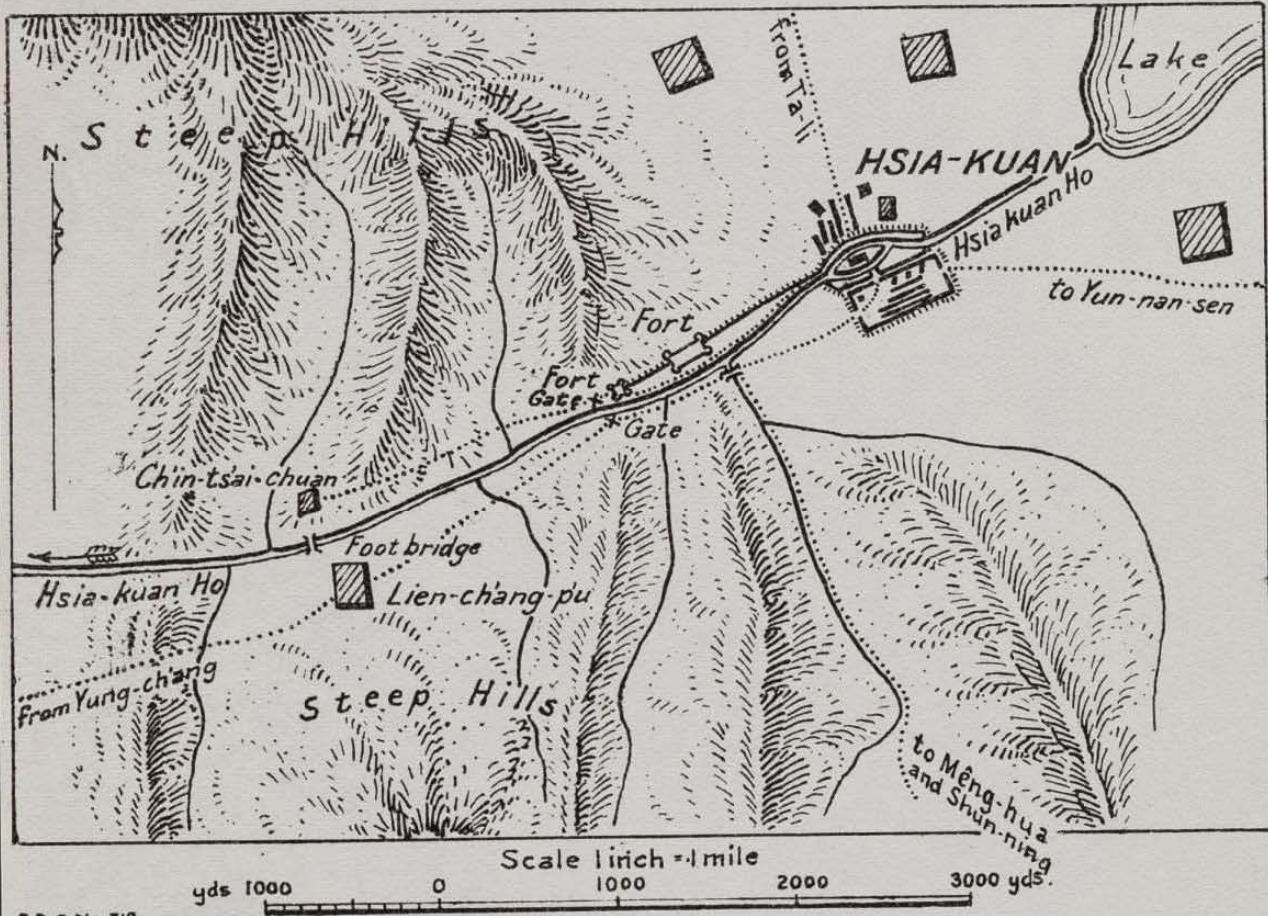


S.D.O. No. 720 July 1913.

ROUGH SKETCH  
of  
MIEN-NING  
by Captain H. R. Davies.

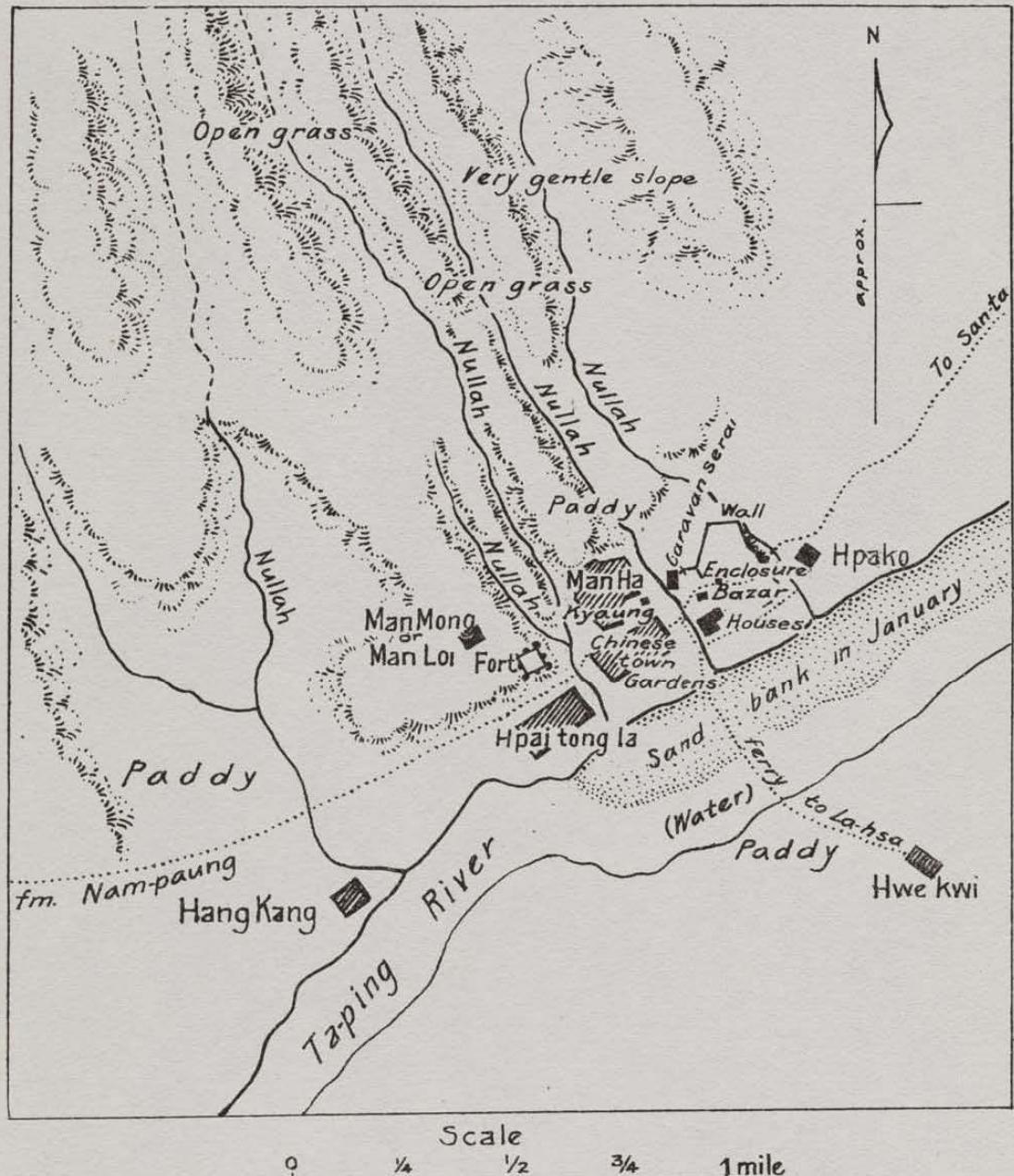


ROUGH SKETCH  
of  
HSIA-KUAN  
by Captain H. R. Davies.  
1895



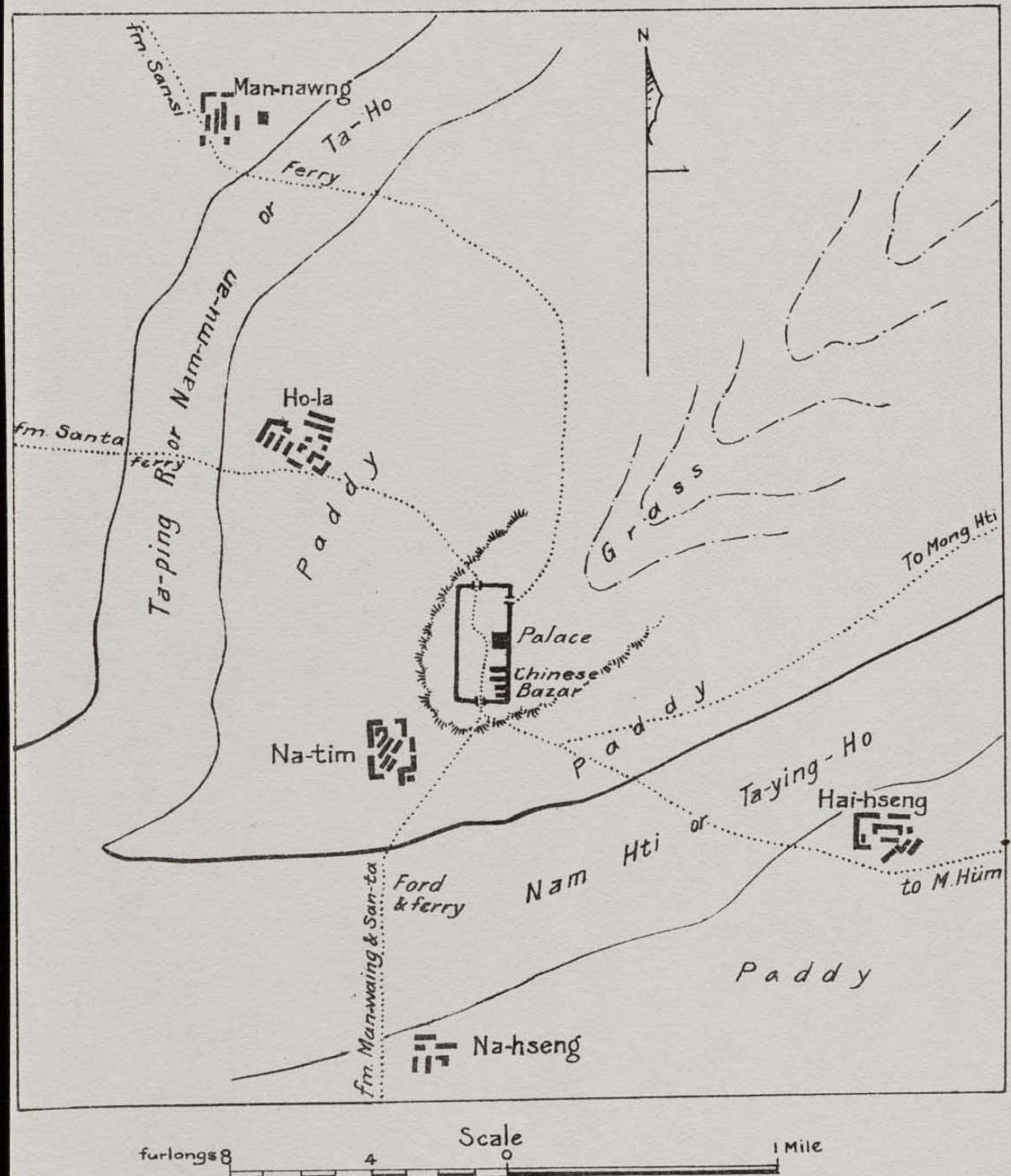
S.D.O. No. 718  
July 1913.

EYE SKETCH  
of  
MAN-WAING  
by Captain H. R. Davies.

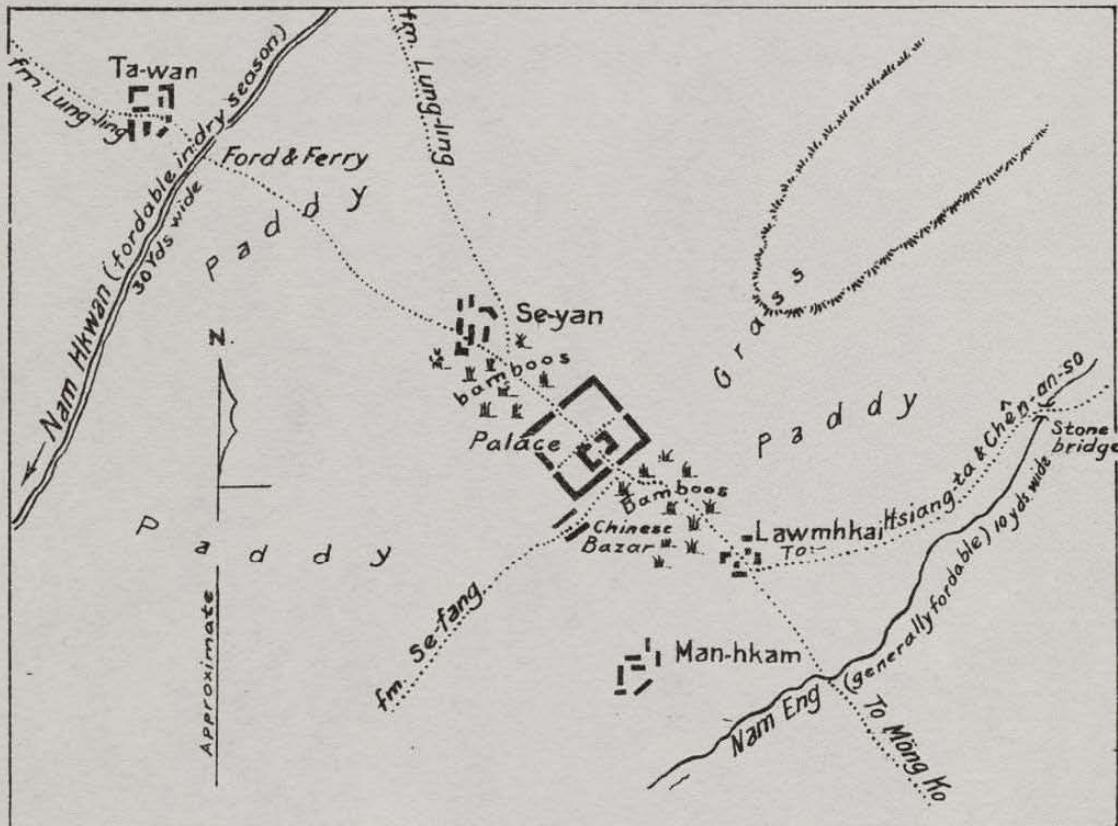


S.D.O. No 717.  
1913

PLAN OF  
MONG NA (KAN-AI)  
by Captain H. R. Davies.  
From Native information,



PLAN OF  
MONG HKWAN  
(MANG-SHIH)  
by Captain H. R. Davies.  
From Native information,  
1894



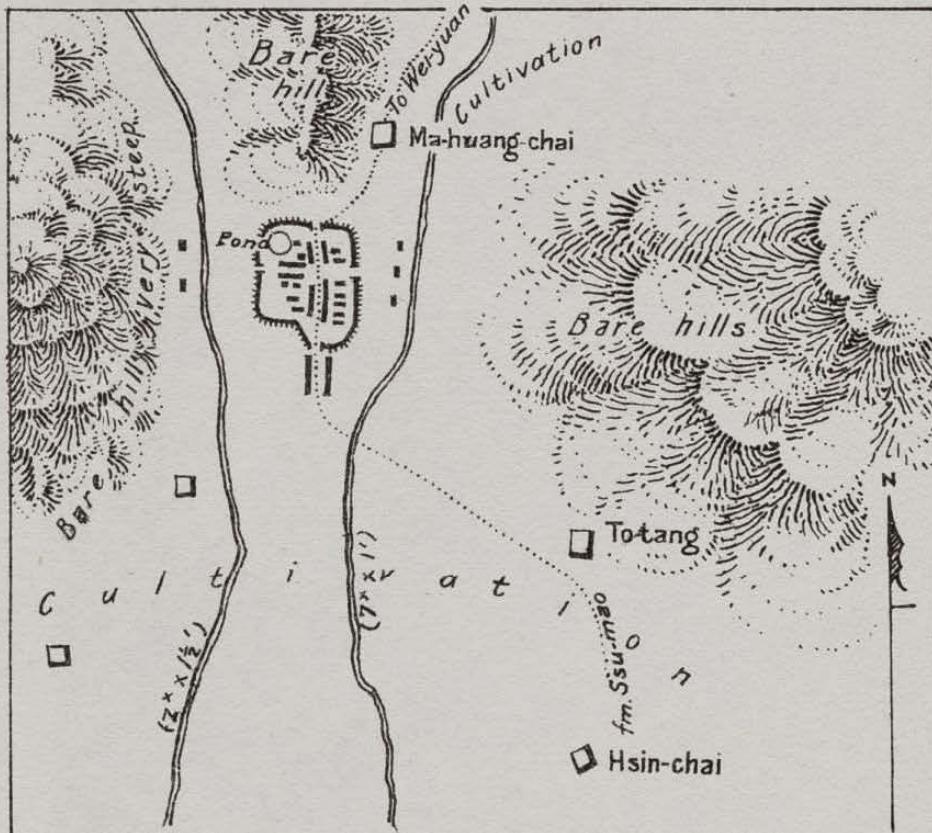
Scale

furlongs 8 7 6 5 4 3 2 1 0

1 Mile

S.D.O.N° 715.  
1913

ROUGH SKETCH  
of  
P'U-ERH  
by Captain H. R. Davies.

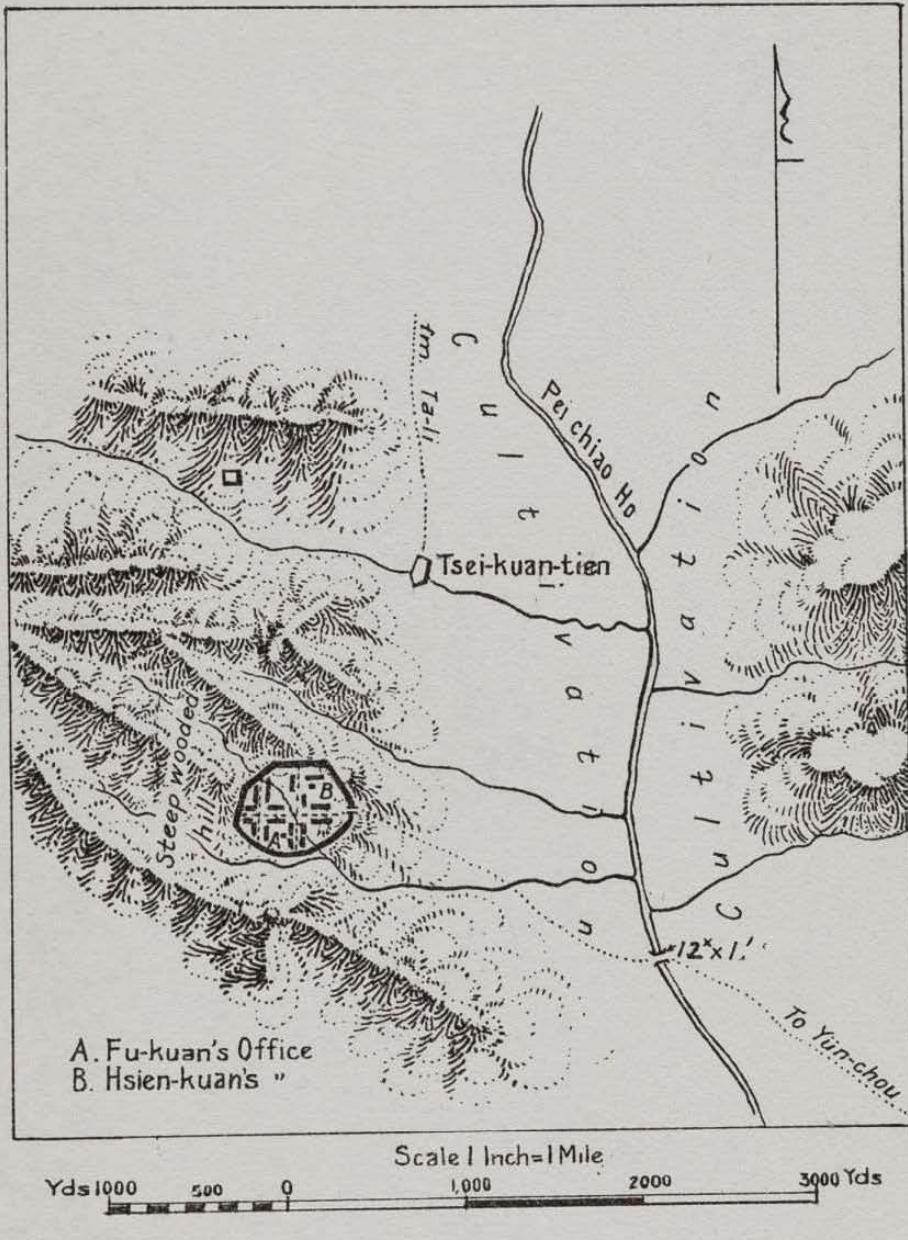


Scale 1 Inch = 1 Mile.

Yds. 1000 0 1000 2000 3000 Yds.

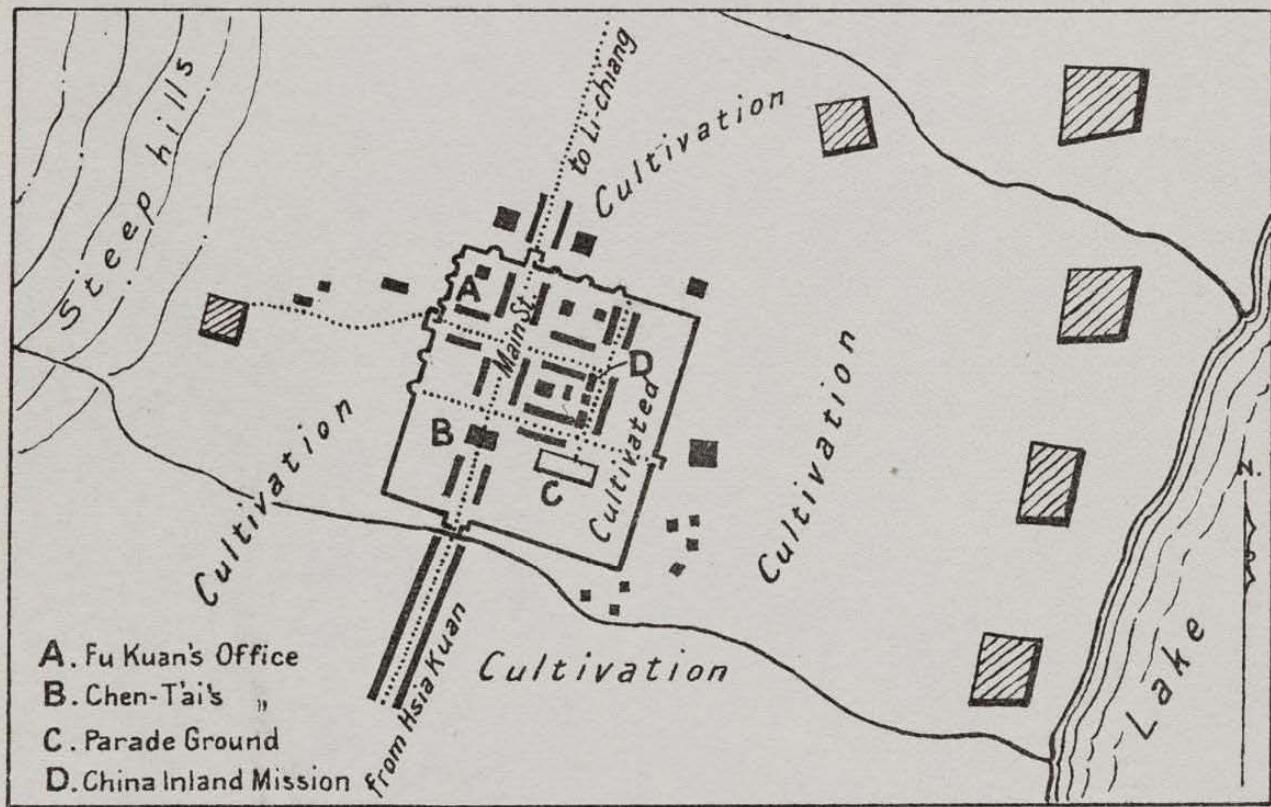
S.D.O. N° 714.  
1913.

ROUGH SKETCH  
of  
SHUN-NING-FU  
by Captain H. R. Davies.

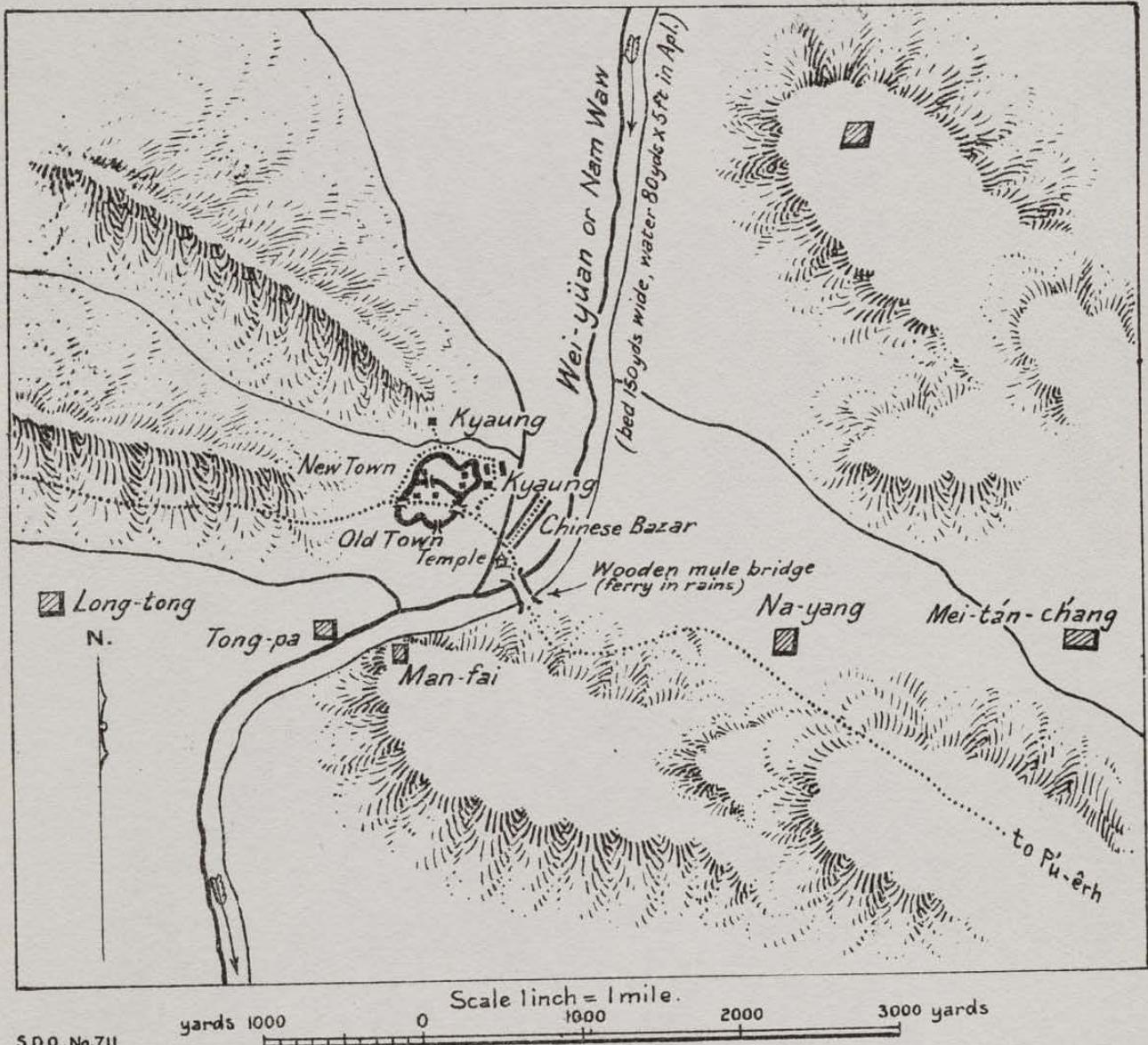


S.D.O. No 713  
1913.

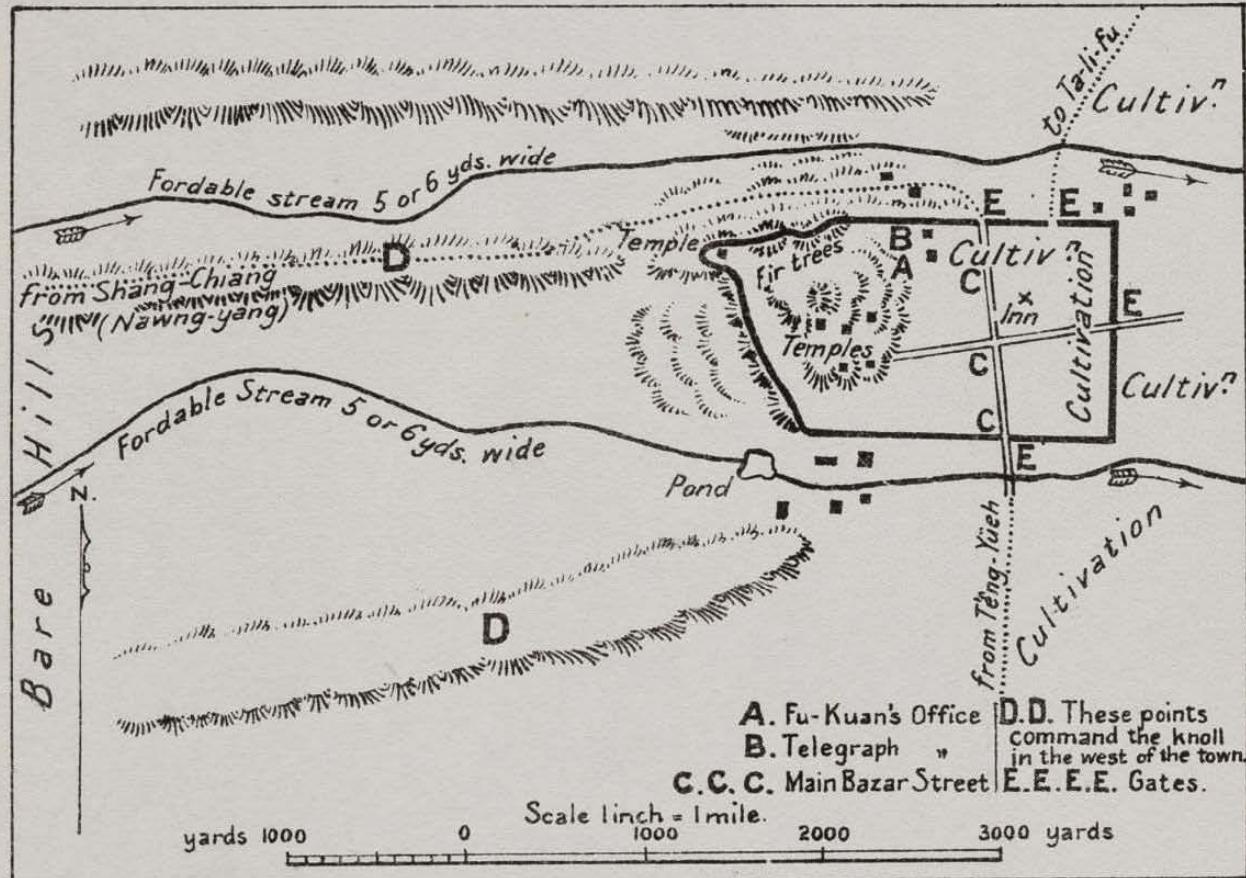
ROUGH SKETCH  
of  
TA-LI-FU  
by Captain H. R. Davies.  
1895.



ROUGH SKETCH  
of  
WEI-YÜAN T'ING  
(MÖNG WAW)  
by Captain H. R. Davies.

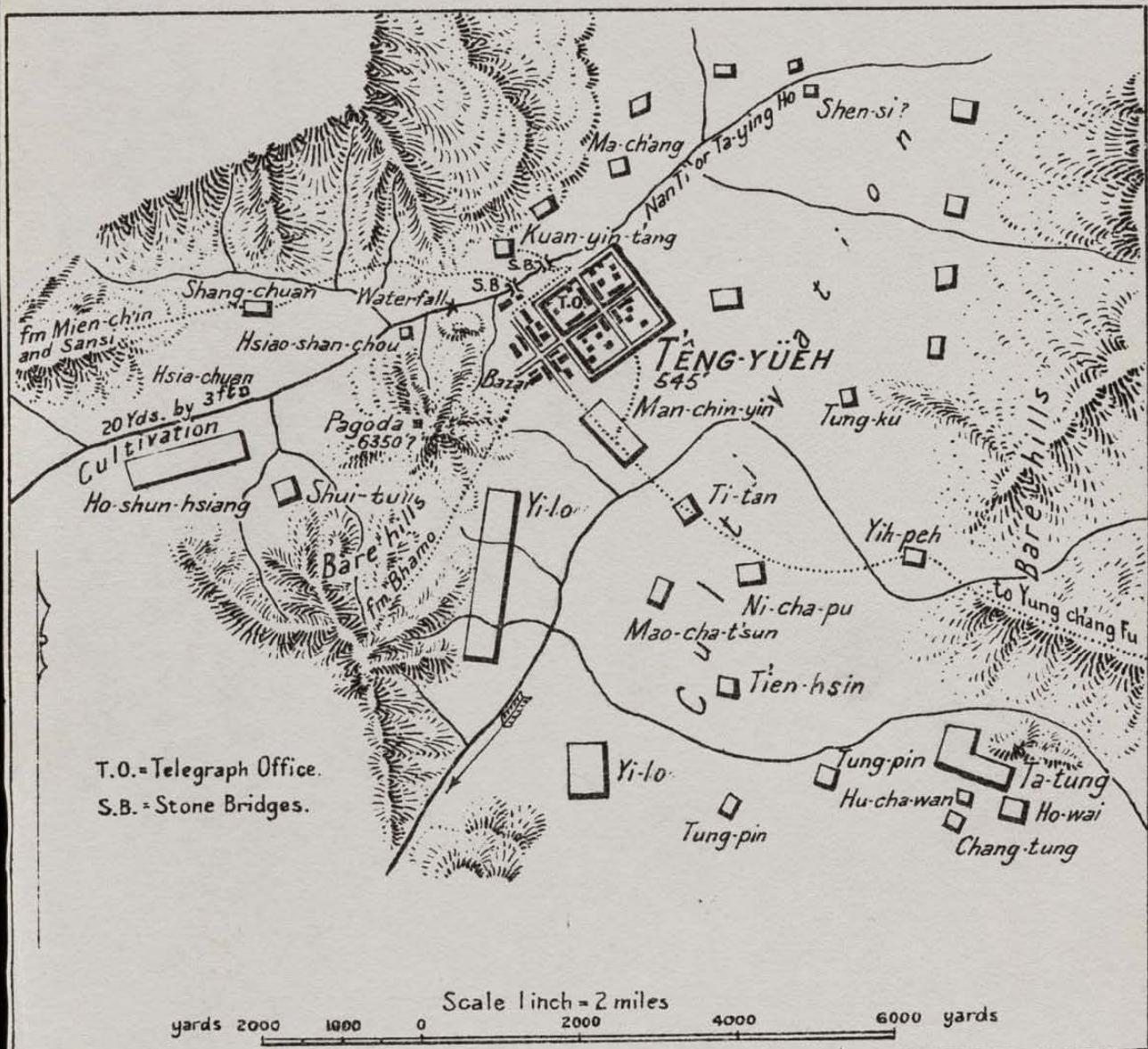


ROUGH SKETCH  
of  
YUNG-CH'ANG-FU  
by Captain H. R. Davies.



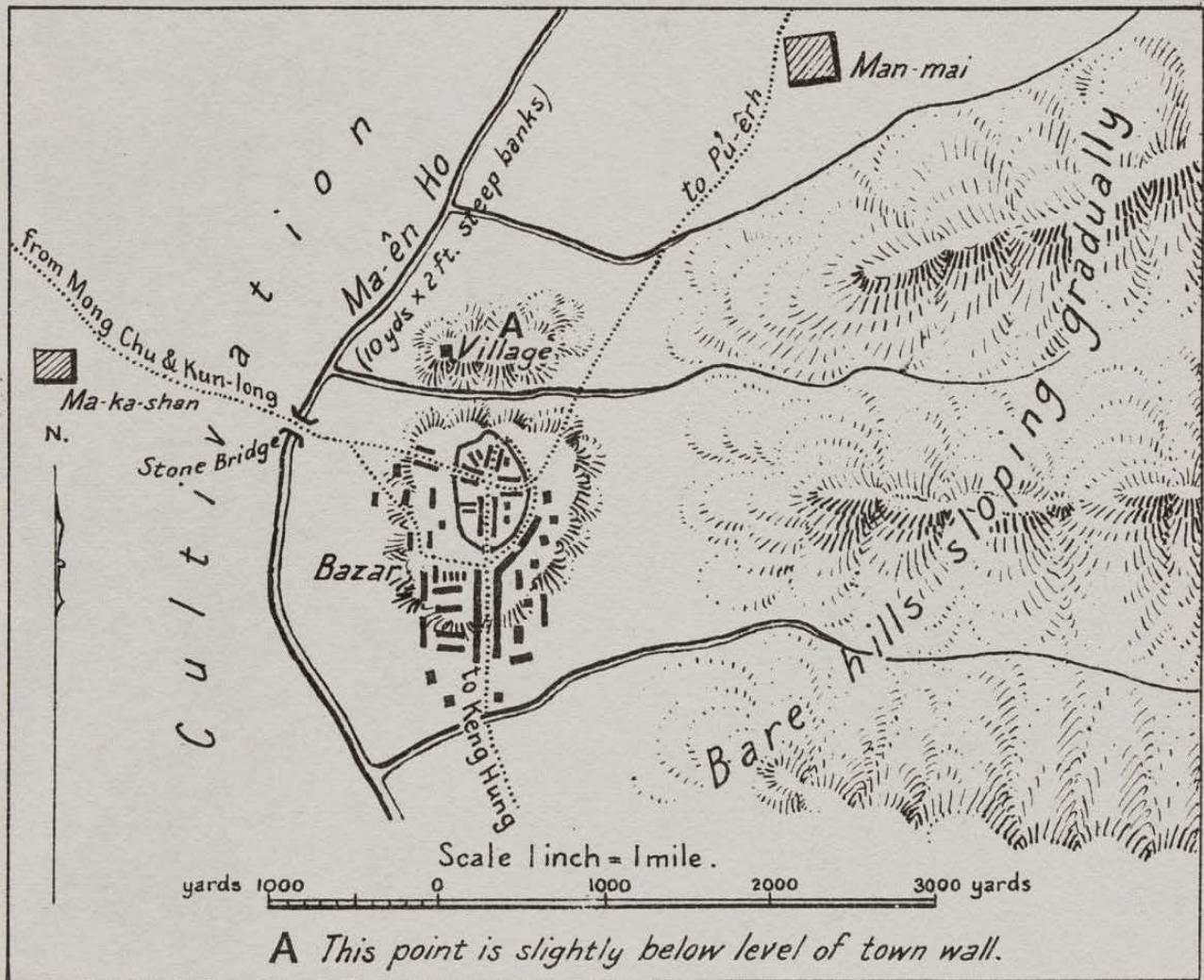
S.D.O. No. 710. July 1913.

ROUGH SKETCH  
of  
T'ENG-YUEH PLAIN  
by Captain H. R. Davies.

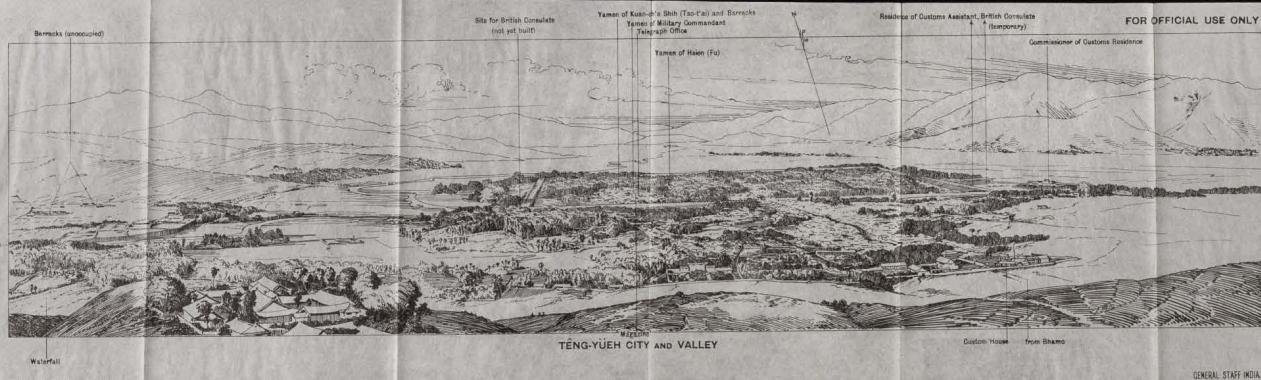


S. D. O. No. 708. July '13

ROUGH SKETCH  
of  
SSÜ-MAO  
by Captain H. R. Davies.

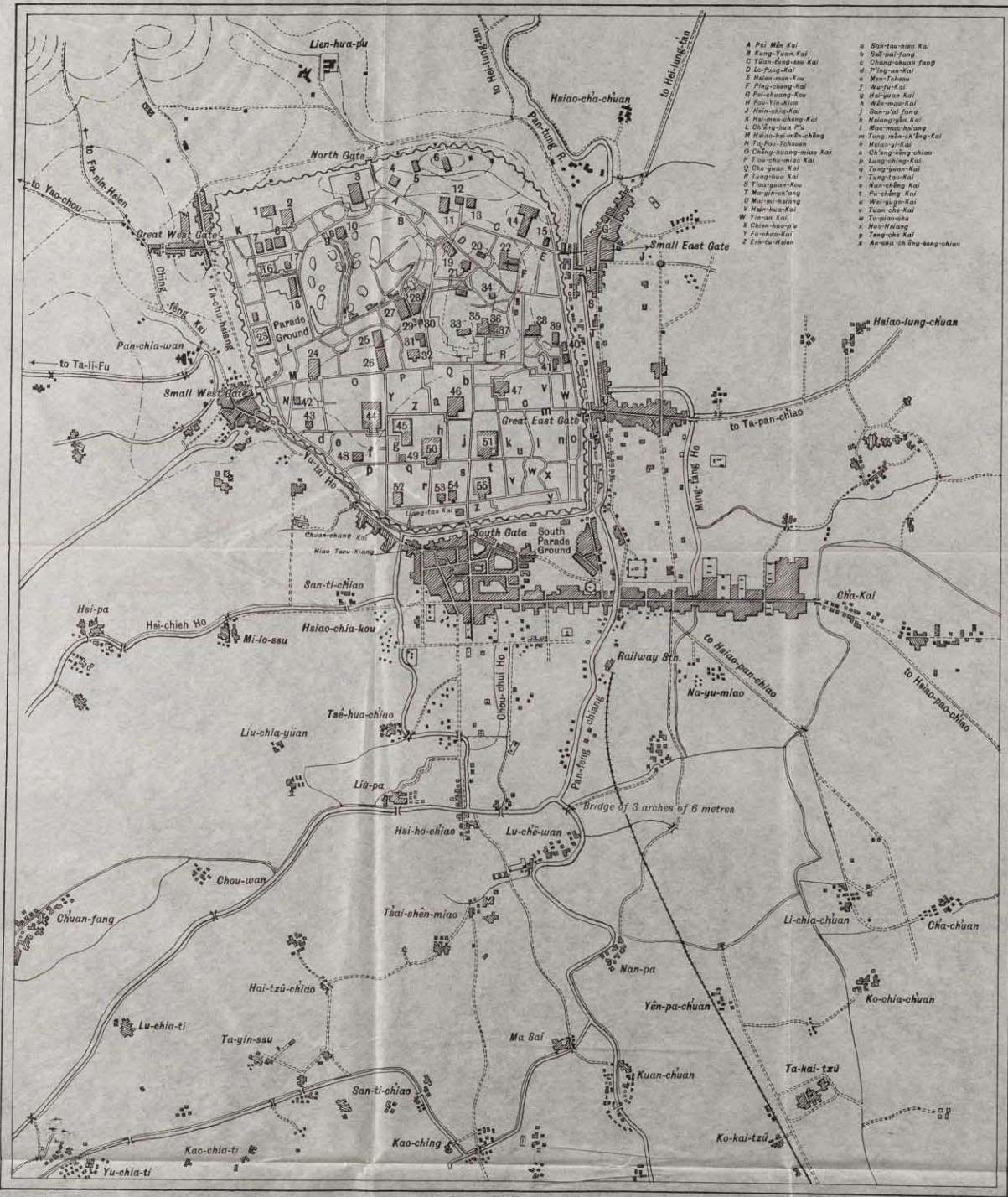


S.D.O. No. 709. July 13.



YÜ-NAN FU

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S. D. O. No. 771 October, 1913.

Scale R. F. 1:20000

2000 Yards.

GENERAL STAFF INDIA.

REFERENCES.

A—British Consulate (temporary.)

A—Site for permanent British Consulate.

B—General's Yamen and Magazine.

C—Telegraph Office.

D—Hsien Kuan's Yamen.

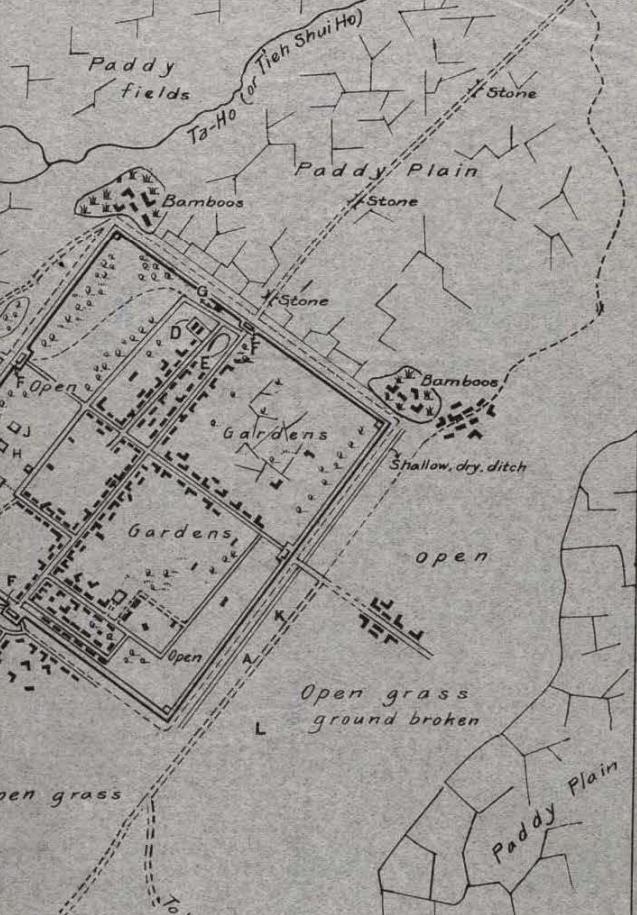
E—Pond.

F—Watch or Guard-houses.

G—Pagoda.

H—Tao-tai's Yamen.

Gently rising slopes  
open grass with numerous graves



J—Barracks of Tu-li-ta-tui.  
K—Customs Assistant's Quarters.  
L—Commissioner of Customs Residence.  
Approximate shape of ground.

PLAN of T'ENG-YUEH

Scale 3 Inches = 1 Mile

1000 Yds

S.D.O. No 723.  
1913

Yds 1000

500

0

open grass & numerous graves

in Bhamo

28

C

TEER OF THE PROVINCE OF YUN-NAN.

C.-103.  
Con.